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ABSTRACT

This publication is intended to aid local public officials and interested citizens in planning how to best manage rapid population growth resulting from construction and/or development of new energy-related facilities. In particular, it discusses what the impact of an energy project on a community is likely to be, shares ideas for action based on the actual experience of other communities, and points out sources for information, planning help, and financial assistance. The approach of the booklet is deliberately nontechnical and relies on actual community case studies whenever possible. Topics of the individual chapters include employment and population, managing growth, land use and housing, other impacts on the community, paying for the impacts, and sources of assistance. Also included are lists of federal, state, and regional agencies that can provide help to local communities and brief case studies of four areas that were affected by the inception of major energy projects. (JG)

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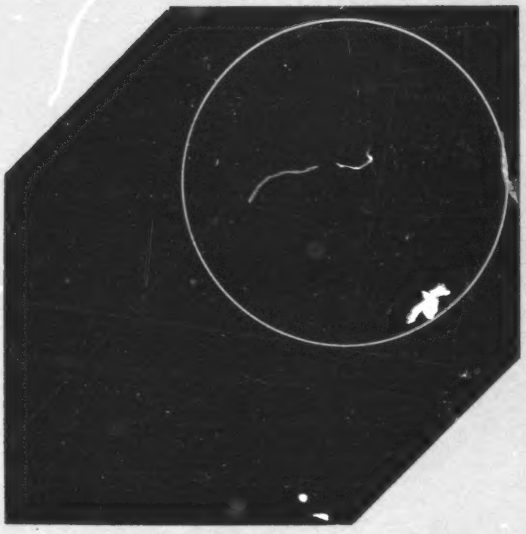

HUD

RAPID GROWTH FROM ENERGY PROJECTS

IDEAS FOR STATE AND LOCAL ACTION

A PROGRAM GUIDE

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
OFFICE OF COMMUNITY PLANNING AND DEVELOPMENT

701 COMPREHENSIVE PLANNING PROGRAM
IN COOPERATION WITH THE FEDERAL
ENERGY ADMINISTRATION

1976

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HUD-CPD-140
April 1976

FOREWORD

This book has been prepared through cooperation between the Federal Energy Administration and the Department of Housing and Urban Development, in response to inquiries from officials, firms and private citizens from all parts of the United States asking how to manage growth when an area is suddenly affected by a major energy project. Growth management is difficult enough when a metropolitan area has many years in which to plan for and absorb in-migration and natural population increases. When a major plant is to be constructed, mining started or expanded, or oil brought in from off-shore facilities, the small towns and counties usually involved are expected suddenly to make available housing and related facilities, transportation, and other essential services. With a limited tax base, often without planning capacity and totally without experience, these communities necessarily turn to larger units of government for assistance.

There is now a limited amount of contemporary experience to draw upon. It is the intention of this publication to share that experience with those who are immediately confronted with, or are students of, these problems. Some of the early work has been accomplished through grants—provided through the Department's 701 Comprehensive Planning Assistance Program—including grantees such as Colorado, Wyoming, Montana, areawide councils of governments, and counties. Others have used State, local and foundation or corporate funds. Special 701 grants were recently awarded groups of States on the East Coast and in the Rocky Mountain area to assist them to develop cooperative solutions to, problems related to off-shore oil and extensive strip mining.

The President has made clear the need to expand domestic energy supplies within this decade. At the same time, the associated fiscal, environmental and community imbalances and alterations can and must be addressed. To accomplish this, important and parallel improvements in the planning and management capacity of States, areawide agencies and local governments will be required. This is work toward which 701 funds have been applied since 1954. This publication reflects HUD's intention to enable all jurisdictions to benefit from the significant experience of a few through the collection and dissemination of that experience.

This guide also reflects the first major product of a recent cooperative agreement between the Federal Energy Administration and the Department of Housing and Urban Development. We acknowledge the assistance of their staff in composition of this guide and in cooperation in research and editorial work related to the guide. In particular, thanks are due Hubert Van Dyke and Emmett Turner. Primary authorship and composition of the guide was done by David C. Williams, including data for charts and tables which are largely a result of his own research.

This publication should not be taken as an expression of either HUD or FEA policy. Rather, it is an attempt to synthesize and present the composite experiences to date of States, areawides, counties and cities coping with the impact of rapid growth resultant from the construction and/or development of new energy-related facilities. As such, it is non-technical and whenever possible relies upon case studies the reader may refer to for further information, drawn from the experience of local government officials themselves. Names and addresses are current as of the date the guide went to press.

David O. Meeker, Jr. FAIA, AIP
Assistant Secretary
Community Planning and Development
March 1976

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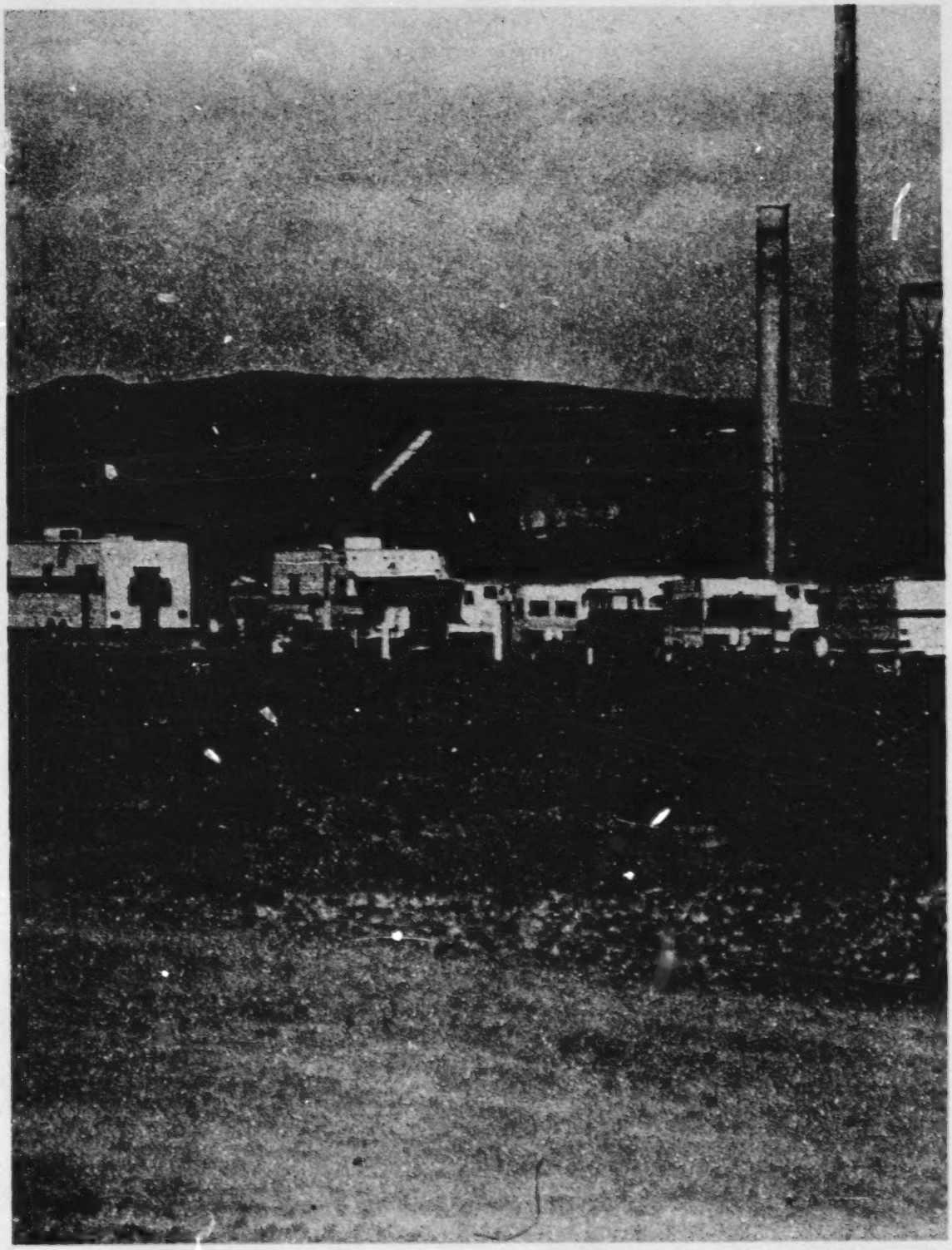


RAPID GROWTH FROM ENERGY PROJECTS

Hundreds of new energy projects – from coal mines to nuclear power plants to offshore oil and gas – are proposed to meet national energy needs and goals. One or more of these projects may be proposed for your community. Long-term positive contributions to the local economy are easy to document: improved energy supply, increased employment, in-migration of skilled labor, and diversification and expansion of the economic base. The energy produced will be of great benefit to the economy of the region and the nation as a whole.

But at what price are these benefits purchased? There may be overcrowded schools, higher prices and taxes, traffic congestion, and pressures put on housing supply and medical services. Loss of the relaxed pace of life and friendly life style may very well emerge. These impacts will face citizens and elected officials of many communities across America. How are they to predict and plan for impacts?

In the past few years, a number of States and communities have felt the impact of energy projects. They demonstrate what often happens to population and housing, to services and the quality of life. Their experience in overcoming three problems – information, management and money – can help guide future planning and action programs of other States and communities.

The purposes of this publication are simple:

- To show what the community impacts of energy projects are likely to be;
- To share ideas for action among communities, based on actual experiences; and
- To point out sources of help: for information, planning and financial assistance.

APPROACH OF THIS PUBLICATION

To be of value to you in planning for and responding to energy project impacts, the emphasis of this publication is:

- *On ideas for action.* There have been many studies of the impacts, actual and projected. What is needed now are ideas on what to *do* to prepare for the impacts.
- *On the construction phase.* It is immediate, rapid, massive, yet temporary. Conventional planning, management and financing are not geared to this pattern.
- *On smaller communities.* The rate of growth in these communities is much higher than it would be in larger ones. And the smaller communities generally have more limited resources at the start.
- *On generally transferrable information.* Responses to one type of project may be used for others. There is a concentration on Western coal projects in this book. That is where the largest number of cases are presently available.
- *On brevity.* To keep down the size, only selected examples have been included. Some problems have few ready solutions (for example, the inflation of housing prices and changes in life style). In presenting sources of assistance at the Federal level, only those which were available at the time of publication are included.

ENERGY PROJECTS

The national policies and programs being developed to resolve our energy problems include the conservation of energy, research and development on new energy sources and the construction of many new energy projects. While many alternative energy futures have been considered, all recognize a need to accelerate production of domestic resources. Conservation is important, but cannot do the whole job.

The energy projects which are proposed, and discussed in this publication, are: coal export mines, electric generating plants (coal-fired), substitute gasification plants (from coal), oil shale processing facilities, nuclear power plants, support facilities for offshore oil and gas, platform fabrication facilities, deepwater ports, liquid natural gas (LNG) conversion plants, and oil refineries. Many parts of the nation would be affected, with the most prominent being:

- *Rocky Mountains and Northern Great Plains* – coal and oil shale
- *Appalachia* – coal and nuclear plants
- *Coastal zones* – offshore oil and gas, and nuclear power plants
- *Nationwide* – nuclear power plants

THE IMPACT UPON COMMUNITIES

Construction and operation of an energy project can provide many benefits to the region in which it is located. The economic base may be expanded and diversified, providing new employment opportunities – especially for young workers who might otherwise have to leave the region for work. The energy supply may be maintained or improved, and the tax base of the region strengthened. Comparative case studies show that in Tullahoma, Tennessee (with the Arnold Engineering Development Center) and in Idaho Falls, Idaho (with the National Reactor Testing Station – both Atomic Energy Commission facilities) the "quality of life appears to have been enhanced."[1] The reason for this was a moderate growth rate, fol-

lowed by stable permanent population. The impact was gradual enough to allow public services to keep up with demands.

All too often, however, **while benefits are long-range and regional, the negative impacts are immediate and local.** The severity of the impacts on communities depends on several factors: original population size, rate of growth, level of unemployment, condition of local services and facilities, and quality of planning. Impacts also vary by the type of energy project. Of all these indicators, the **rate of growth** appears to predict severity of impacts best. In its studies of energy impacts, the Denver Research Institute concluded:

"An annual growth rate of ten per cent strains local service capabilities. Above fifteen per cent seems to cause breakdowns in local and regional institutions."[2]

Employment and Population

What happens when an energy project comes in? If it's a nuclear power plant, for example, there could be a surge of construction workers up to 2,500 at its peak. Five to ten years will be required to build the power plant. The population will increase as workers' families come in. The number of workers needed to run the energy project after it is built is generally less than the construction force. Providing housing and services is difficult with a temporary build-up and decline.

Land Use and Housing

In most cases, the first local impact is on housing. The few vacant houses are quickly snapped up, by either temporary or permanent residents. The most visible sign of the energy boom is the mobile home. When all available standard housing has been taken up and little new housing is being built, workers and their families turn to mobile homes. If there are not enough spaces within the existing community, the units will scatter across the landscape creating "aluminum ghettos." It is not the mobile home itself which is the problem, but inadequate planning, lack of control over siting, and few amenities.

Community Life

Life in the community changes as a fast rate of growth produces symptoms of urbanization, such as a speeded up pace of life, congestion, inflation of prices and scarcity of amenities. Particularly significant are possible tensions between long-time residents and newcomers, and the lack of activities for wives of project workers. A major problem in human services is likely to be medical care, getting enough doctors for increased population. Traffic is often a problem, and added housing puts large demands on the water and sewer systems.

Fiscal Impacts

Revenues from energy developments are generally sufficient — in the long-run and at the regional level — to offset induced costs. However, for the individual community, there are problems of timing and geographic distribution of revenues:

- *Revenues may appear too late.* The taxes imposed on the energy project come in after the project is completed. Where is the city or county to get money to solve problems which are there now?
- *Revenues may be distributed without regard to need.* The taxes on the plant usually go to the county (and the state), while the major impacts are in the cities where the people live. The cities may get no tax money at all from the energy project. Or the project may be in one county, while the community where workers live is across the county (or even state) line. How can tax revenues line up with needed expenditures?

CONSTRAINTS ON ACTION

If we know what the problems are, what keeps us from solving them? Well, we know a lot more about the problems than the solutions. There are many constraints that limit the ability of the local community and State to respond. In general they involve the inability to predict, lack of growth management tools and experience, and lack of money. It is difficult to plan a meaningful response when the details of the future are unclear.

Most communities which will bear the impacts of energy projects are small and remote, often without experienced and professional help. In the six States of the Denver Federal Region, one-half of the 131 communities to be impacted have less than 1,500 population *and* are more than 100 miles from a metropolitan area.[3] The fiscal constraints place limitations by restricting tax rates, debts, grants and allocations available to local and State governments.

These constraints can be overcome with foresight, planning and cooperative efforts among local communities, area-wide districts and States.

I. EMPLOYMENT AND POPULATION

Community employment and population increase and decrease somewhat predictably as an energy project is planned, constructed and operated. This chapter discusses the typical "boom" growth cycle, the problems communities have in predicting what will happen, and ideas communities, areawide districts and States have used to obtain the information they need.

A. THE GROWTH CYCLE

During planning and construction phases of an energy project, employment and population increase rapidly from a generally static base. From the peak, employment drops – also rapidly – as the plant is completed.

1. The dimensions of typical energy projects are presented in Table 1. The number and timing of employees (based on the actual experience of projects of the sizes shown) vary by the type of project. Substitute gassification plants and oil refineries have the most rapid buildup. Coal-fired electric and nuclear generating plants require slightly fewer employees, but employ them for longer periods of time. Coal export mines and platform fabrication facilities require few construction workers, but generate larger numbers of operations employees.

CAUTION:

The typical projects, numbers of employees and population added presented in this section are for illustration only. While useful to give a general idea of impacts, they should not be used for precise planning for any specific project. Impacts vary greatly depending on the situation.

2. The employment patterns over time – through construction and into operations – of four selected energy projects are presented in Figure 1:

- Substitute gasification plant (from coal) with capacity of 250 million cubic feet per day, as proposed on the Navajo Reservation.[5]
- Nuclear power plant of about 1,600MW capacity, as recently completed at Calvert Cliffs, Maryland.[6]
- Electric generating plant (coal-fired) of 2,250MW capacity, as nearing completion at Page, Arizona.[7]
- Coal export mine, of about 9 million tons production per year, as operating at Fruitland, New Mexico.[8]

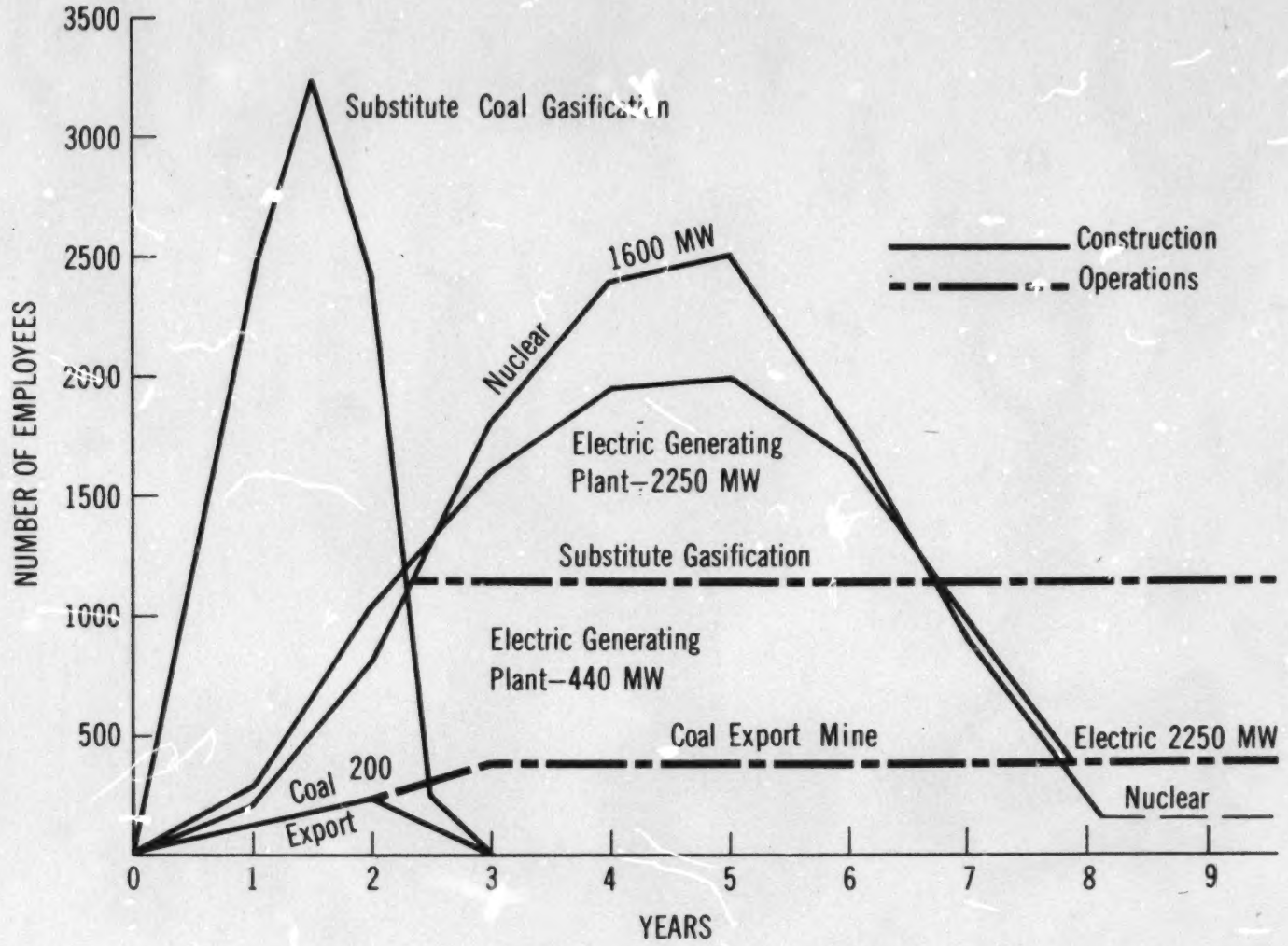
3. Added direct construction employment generally brings with it a surge of supporting service employment and population. Sweetwater County, Wyoming, for example, doubled in four years with the Jim Bridger Power Plant. Valdez, Alaska grew from 1,000 to over 3,000 in less than one year with

Table 1

TYPICAL ENERGY PROJECTS

Project	Size	Construction Time	Peak Force – Construction	Operating Force
Coal Export Mine	9M tons/yr	2–3 years	175–200	325–475
Electric Generating Plant (including coal mine)	700 MW 2,250 MW	4–6 years 6–8 years	750–950 2,000–3,000	75–100 350–400
Substitute Gasification Plant (includes coal mine)	250 mcf/day	2½–3 years	3,000–3,500	1,050–1,250
Oil Shale Processing Facility (includes mining)	50,000 bbl/day	3–4 years	2,400	1,050–1,450
Nuclear Power Plant	1,600 MW	5–9 years	2,500	150
Offshore Oil and Gas Support	Per Rig	3–4 years	175	90
Platform Fabrication Facility	2 platforms/year	5 years	400	1,000–1,500
Deepwater Port	2 mooring spaces	3–4 years	1,250	75–90
Liquid Natural Gas (LNG) Conversion Plant	1,000 mcf/day	2–3 years	300–400	50–100
Oil Refinery	250,000 bbl/day	2½–3 years	3,500–4,500	450–900

Figure 1
EMPLOYMENT PATTERNS FOR SELECTED ENERGY PROJECTS



construction of the port for the Trans-Alaska Pipeline. In an extreme case, Colstrip, Montana, the site of two 330MW electric generating plants has grown from 200 persons in 1970 to 3,000 in 1975, and could grow to 6,000 by 1978 with the addition of two 770MW plants.[9]

The first population impacts come from the construction workers and their families. Recent experience in projects in the United States (other than Alaska) indicates that between 50 and 75 per cent of construction workers bring their families with them.[10] The average family size ranges from 3.5 to 3.9 persons.[11]

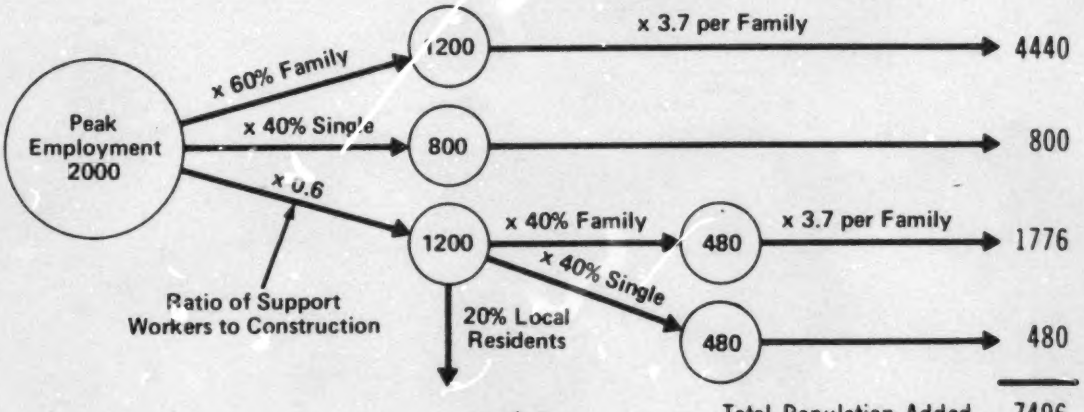
One of the most difficult numbers to predict is the number of support (secondary) employees needed because of new basic employment. A number of factors affect the basic/secondary ratio: the size of the community before the project, income of workers, length of construction phase, and distance from metropolitan areas are the most important. As a general rule, during construction from 0.3 to 0.9 secondary employees are needed for each new construction worker.[12] Because construction is temporary, this ratio is lower than that after operations begin.

Figure 2 illustrates, in simplified form, the employment and population impacts on a small, remote community of constructing a 2250MW electric generating plant. This illustration assumes that all construction workers come from outside the community. About 60 per cent may bring their families, with an average family size of 3.7 persons. For each construction worker, 0.6 secondary workers will be required. Forty per cent of these secondary workers will have families, 40 per cent will not, and 20 per cent will be local residents (not adding to population). In this example, 2,000 project workers at the peak of construction will result in an added population of 7,500.

4. For most types of projects, the operating force will be less than the construction force. As the project nears completion, the number of workers will decline and population will drop from its temporary peak. The percentage of workers with families residing in the community will increase to between 80 and 90 per cent of the total. The number of secondary workers will also increase, to a range of 1.1 to 2.3 for each employee of the ended project. Figure 3 illustrates the impacts of this permanent employment on community population. For the same 2,250MW project, 775 permanent workers will result in an added permanent population of 4,739 for this particular example.

5. The total population added by an energy project will change year-by-year over the construction phase and into the operating phase. Figure 4 shows that change for the 2250MW electric generating plant

Figure 2
EMPLOYMENT AND POPULATION ADDED BY CONSTRUCTION
Example of 2250 MW Coal-Fired Electric Generating Plant



being used as an example. The peak of construction is in Year 5, with 2,000 construction workers and 7,500 added population (derived from Figure 2). There will be a sharp drop to Year 8, with about 800 workers and an added population of 3,400. By Year 10, with full operations, there will still be 800 workers, but the added population will have grown to 4,739 (derived from Figure 3).

6. The impacts demonstrated above assume that only one project will be built. But in many areas, there will be multiple projects, and these will have cumulative effects on employment and population. If several projects are built at the same time, with nothing to follow, the impact on the community can be devastating. If the timing of the projects can be spaced out evenly, impacts of both growth and decline will be less severe.

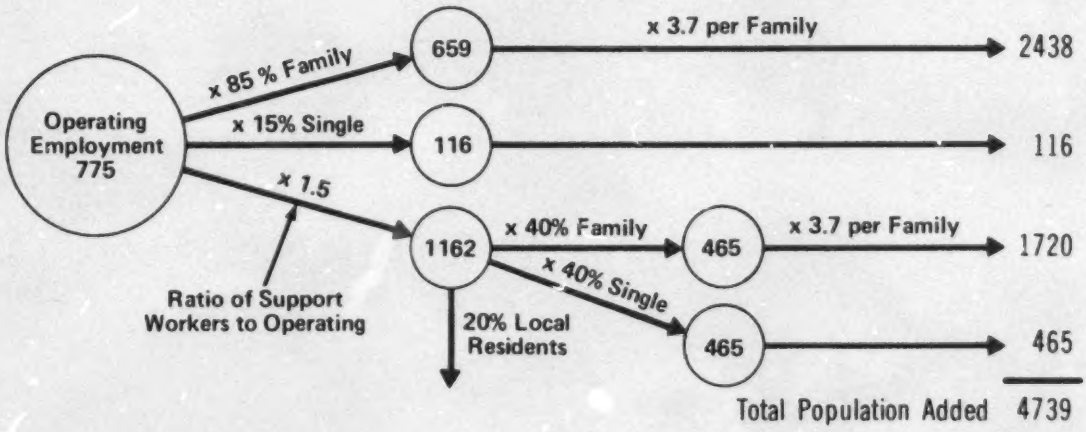
7. Impacts can be more positive if jobs are held by local residents rather than newcomers. Demands for additional housing and services are greatly reduced. New construction jobs can help raise incomes and increase job skills. However, the ability to hire local residents varies, depending on the type of project, size of community and skills available. Dramatic projects often attract a large number of persons in search of work. In Whatcom County, Washington, the unemployment rate rose from 6 per cent to 9 per cent during construction of an oil refinery. In Alaska, the rate has risen because of large numbers of workers hoping to find work on the pipeline. The rate in Fairbanks now exceeds 11 per cent.

8. The labor force size, timing and hiring patterns vary by type of project and location. Some impact of offshore oil and gas exploration and drilling will occur in already urbanized and industrialized areas, where impacts will be minor compared to types of projects more often located in rural settings.

B. PREDICTION OF IMPACTS

Most communities rely on energy company estimates of the size and timing of projects and anticipated numbers of employees. In some cases, these corporate estimates are not made public early enough to permit sound public planning. Even publicly-announced estimates can change quickly in the volatile process of energy project development. For example, at Niggs Bay, Scotland, the company estimated 600 workers for a proposed platform fabrication facility. Within three years the work force had peaked at over 3,000.[13] The announcements for the Jim Bridger Power Plant made in 1971 projected a work force of somewhere between 500 and 1,500. The Sweetwater County,

Figure 3
EMPLOYMENT AND POPULATION ADDED BY OPERATIONS



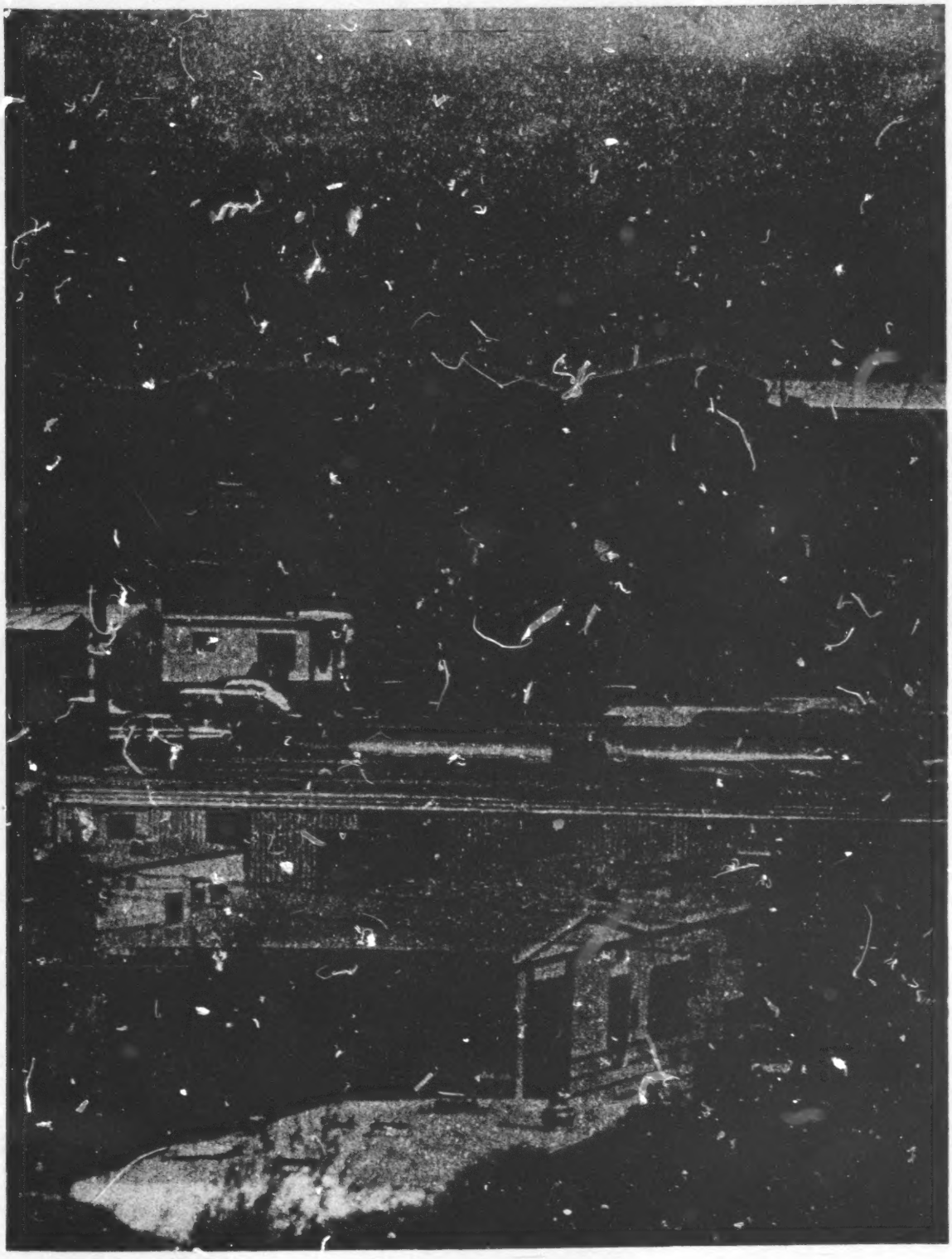
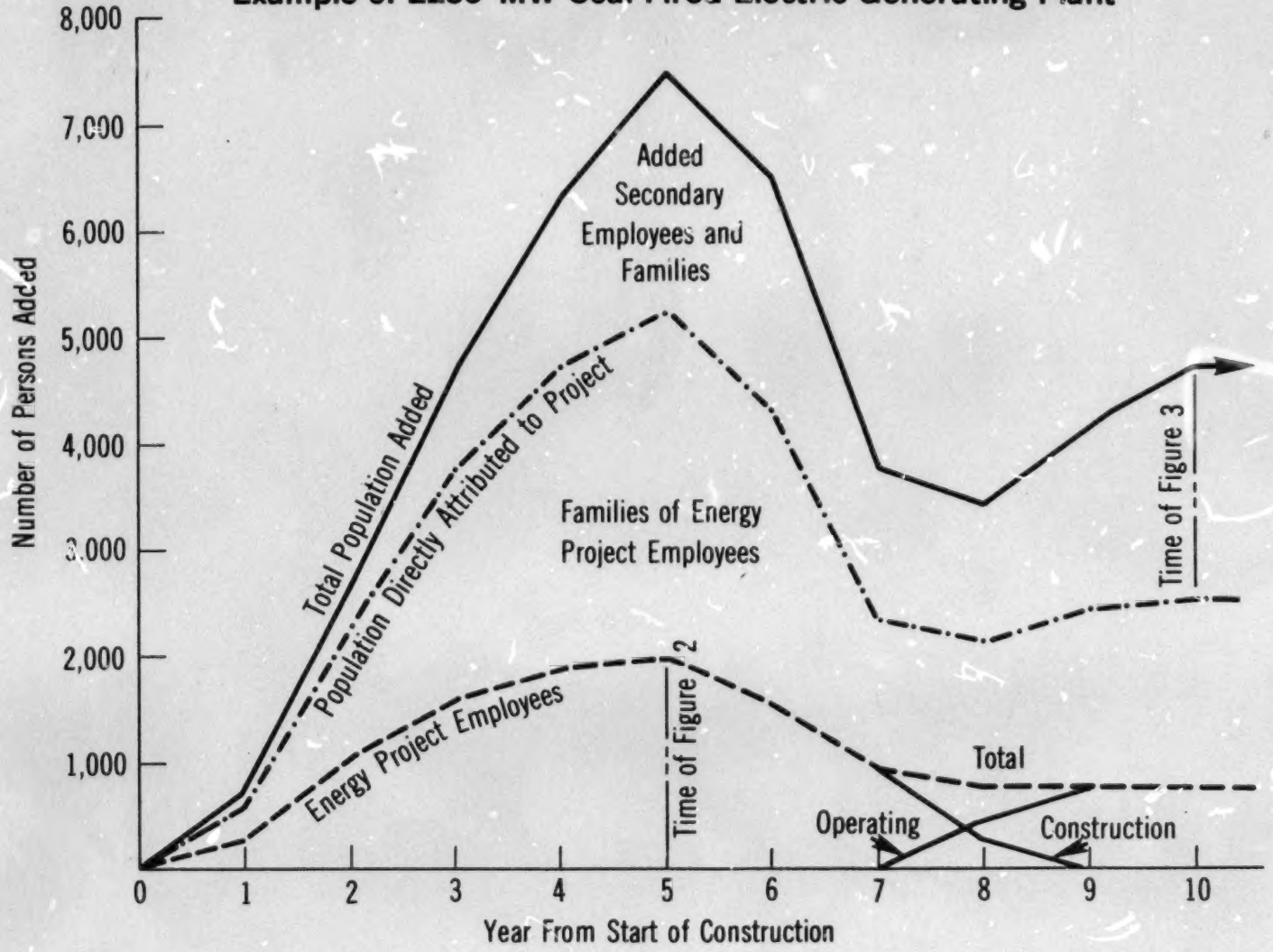


Figure 4

ADDED POPULATION FROM ENERGY PROJECT

Example of 2250 MW Coal-Fired Electric Generating Plant



Wyoming Comprehensive Plan of 1972 estimated 800 additional construction workers. The actual number of workers at the plant by 1974 was over 3,000, and the 1995 population projections were exceeded by 1975.[14]

"Knowledge of the number of employees is not as critical as defining impacts and the roles of public and private agencies."

– Mayor of impacted Western town

With this quote in mind, the following guidelines are offered for getting and using information:

- Regional socio-economic studies are important for national and regional policies, but must be supplemented by specific local information.
- Specific studies have to be made of each community and of each project proposal.
- These studies should identify ranges of impacts to be responsive to likely changes in magnitude and timing.
- Close cooperation on plans and information is needed between energy companies and the local governments.
- Communities must recognize the interests of the energy and construction companies – low labor force turnover, and high productivity. Conversely, the interests of the local community must also be recognized – growth at a manageable rate.
- The emphasis of community leaders has to be on setting goals and objectives, preparing a growth management plan, and seeing that it is carried out (See Chapter II – Growth Management).

C. IDEAS FOR UNDERSTANDING IMPACTS

Information from Industry: Southwest Wyoming Industrial Association (SWIA)

One of the major problems in Sweetwater County, Wyoming was the lack of information from industry about future plans. The problem was compounded by the presence of 12 companies – in coal, electricity generation and trona mining. In conjunction with the formation of the Sweetwater County Priorities Board (See page 14), the 12 companies formed the Southwest Wyoming Industrial Association.

The purpose of this group is to facilitate coordination between local industry and local governments. This is done by preparation of a two-year plan of information gathering and presentation. The SWIA holds quarterly public meetings with local officials to present employment projections for the coming year. To assure confidentiality, individual company projections have been combined.

The Association is governed by two committees: the Operating Committee, which consists of the local managers of 12 industries, and the Executive Committee which includes headquarters representatives for each. A full-time executive director serves as the primary liaison for the Association.

Contact: Ernie Mecca, Executive Director, Southwest Wyoming Industrial Association, 638 Elias Avenue, Rock Springs, Wyoming 82901, (307) 382-4190

Call for Voluntary Information: State of New Jersey

As part of its planning for the Coastal Area, the New Jersey Department of Environmental Protection needs information on all potential energy projects. To obtain this information, it is putting out a "Call for Submission of Information, Recommendations and Suggestions for Coastal Planning for Energy and Energy Related Facilities in New Jersey."

This call goes out on a regular basis to all public utilities operating within the State of New Jersey, and to all energy companies which have expressed an interest in projects, primarily nuclear power plants, support facilities for offshore oil and gas, and LNG conversion plants. Information requested includes the following:

- physical requirements for facilities
- analysis of potential locations
- summary analysis of potential environmental and economic impact on the coastal zone
- identification of the employment created, in both construction and operation
- assessment of the impact on population growth
- status of land acquisition

The information will remain confidential, used only for total coastal area estimates.

Contact: David Kinsey, CAFRA Coordinator, New Jersey Department of Environmental Protection, P.O. Box 1390, Trenton, New Jersey 08625, (609) 292-2653

In some states, this information flow has been formalized and is required, not voluntary. In the case of electricity generating projects, State public utility commissions require showings of need on the part of the utilities proposing new projects (for example, the California Public Utility Commission's procedures for issuance of "Certificates of Convenience and Necessity"). While these indicate total levels of demand, in many States "siting review agencies" have been created to deal with location issues.

Power Plant Siting: State of Maryland

After the controversy surrounding the siting of the Calvert Cliffs Nuclear Power Plant, the State of Maryland decided to improve its advance planning and site evaluation procedures. The result is the Power Plant Siting Program. At the most general level, it includes:

- Preparation by the State's utilities of a ten-year plan of utility needs and proposed sites. (The State will not act unless a site has been listed);
- State evaluation of sites proposed by the utilities. At the present time, evaluation of each site takes 18 months at a cost of over $1 million; if suitable, the site is recommended to the State Public Service Commission for approval;
- Acquisition by the State of four to eight sites, in advance, as alternatives for the utilities if their sites are not suitable. The criteria for selection are based on needs of the utilities, and engineering and environmental factors, plus impact on the community;
- Funding for the entire program is derived from the Environmental Trust Fund, specifically from a surcharge on electricity charges. For 1976 the surcharge is .22 mills/kilowatt hour, which nets about $7 million.

Contact: Director, Power Plant Siting Program, Maryland State Department of Natural Resources, State Office Building, Annapolis, Maryland 21401, (301) 267-1261

An increasing number of studies are being done at the regional level. This is often the appropriate level at which to analyze impacts and devise organizational and financing strategies. Some of these regions are multi-county, "areawide districts" established by the States. In other cases, the region is a multi-state area uniquely impacted by energy development, for example, the coastal zones affected by Outer Continental Shelf exploration activity. Several recent examples of regional analyses follow:

Areawide Districts: Colorado West Area Council of Governments

The potential for producing oil from oil shale on the Western slope of the Colorado Rockies has been discussed for decades. The discussion became much more serious in the 1960's, as companies prepared for leasing of Federal lands for mining. The oil shale industry could bring an additional 50,000 to 150,000 persons to this four-country region which now has 85,000 persons in 14,300 square miles.

The counties cooperated with the State of Colorado, Federal agencies and 13 oil companies on a series of studies on oil shale development starting in 1971. As the studies were underway, the counties formally organized as the Colorado West Area Council of Governments (1972), to coordinate the planning of cities and counties dealing with oil shale impacts. One major product of these studies is the *Tax Lead Time Study* (See page 30). The CWACG reviews applications of local governments for State and Federal funds. It now serves as the Regional Planning Agency for EPA (Environmental Protection Agency) "Section 208" Wastewater Treatment Planning. CWACG is funded by State and local contributions, and grants from HUD 701, EPA and EDA (Economic Development Administration).

Contact: John Patrick Mulligan, Executive Director, Colorado West Area Council of Governments, Box 351, Rifle, Colorado 81650, (303) 625-1723

Studies Under Interagency Agreement: HUD Section 701 Comprehensive Planning Program, and FEA

In August 1975, the Department of Housing and Urban Development and the Federal Energy Administration signed an agreement to encourage State planning for solutions to the Nation's energy needs and to coordinate energy planning activities among State, regional and local government officials. Several major projects are underway with joint assistance of HUD and FEA under this agreement. These include:

1) *Policy and Decision Needs:* Mid-Atlantic Governors Resources Advisory Council (MAGRAC)

The States of New York, New Jersey, Delaware, Maryland and Virginia are conducting a study to assist in developing a coordinated response to the impacts that would result from offshore exploration and production activity. The work program, coordinated for the five States by the State of Delaware, includes tasks to:

- Assess institutional systems and roles at all levels;
- Develop a decision flow chart for significant State and local information needs and management decisions relating to offshore resource exploration activities from 1975 to 1985, and
- Determine siting requirements and impacts of offshore developments.

Contact: Director, Planning Office, State of Delaware, Thomas Collins Building, Dover, Delaware 19901, (302) 678-4271

2) *Guide to Decision-Making:* State of Utah

The State of Utah has for several years been developing a State/regional planning program called the "Utah

Process." As an extension of that process, the State Planning Office will analyze the procedural and research framework for considering the impacts of energy development. The product of this study will be a "Guide to Decision-Making for the State of Utah." It should enable State and local officials to consider long-range impacts and implications of energy projects, such as the Kaiparowits Power Plant, including trade-offs, benefits and costs, priorities of projects, and responsibilities for action.

Contact: State Planning Coordinator, State Capitol Building, Room 118, Salt Lake City, Utah 84114, (801) 533-5246

3) *Onshore Impacts:* State of California

A study similar to the one being done by MAGRAC will be done by the State of California to determine and analyze the onshore impacts of West Coast offshore drilling. This study is designed to provide very specific information, as much of the base work has been done in the State's Coastal Plan. This plan took three years to prepare and will be presented to the 1976 State Legislature for adoption.

Contact: Assistant Regional Administrator, FEA, 111 Pine Street, Third Floor, San Francisco, California 94111, (415) 556-7216

Specific Socio-Economic/Fiscal Impact Studies

A specific impact study can help to identify fiscal and socio-economic consequences of development of a given energy project. Such a study may be useful both in evaluating project proposals and in formulating precise plans for community response.

A good socio-economic/fiscal study would include:

- Inventory of current conditions,
- Projections of employment and population,
- Specific impacts of the construction phase,
- Housing impacts and needs,
- Impacts on public services, private businesses, land use, and quality of life,
- Fiscal impacts: all public revenues and expenditures, both capital and operating,
- Evaluation of planning and management system,
- Recommendations for planning, organizing, controlling land use, and financing.

Projections should be presented in ranges, to allow for the inevitable changes in project size and timing. Examples of recent socio-economic/fiscal impact studies are presented below:

1) *Substitute Gasification:* Navajo Reservation

This study analyzed the feasibility of establishing a new town on the Navajo Reservation to house employees of two or more proposed coal gasification plants. The study used an income model to project the secondary economic impacts and the likely town size. Of special concern were the questions of town site, attractiveness to workers and families, changes from the construction phase to the operating phase, avoidance of a "company town," and financing problems on a Reservation.

Refer to: *Housing and Community Services for Coal Gasification Complexes Proposed on the Navajo Reservation,* for El Paso Natural Gas Company and Western Gasification Company, April 1974.

Contact: Terry McCollister, El Paso Energy Resources Company, 3535 East 30th Street, Farmington, New Mexico 87401, (505) 325-2841, ext. 502

2) *Platform Fabrication:* Northampton County, Virginia

In 1974, anticipating the leasing and drilling on offshore Outer Continental Shelf (OCS) along the Atlantic Coast, Brown & Root purchased 2,000 acres for a platform fabrication facility in Northampton County, Virginia (population 21,000). Construction of the facility itself is estimated to employ 400 workers for five years. Employment is then projected to increase to 1,000 to 2,000 in the operating phase when several platforms are being built.

The surrounding area is rural, with most local people employed in farming or fishing. To assist the County Board of Supervisors in making its decision on the requested zone change, Brown & Root put up the funds for a three-month study of potential impacts. The study found the impacts to be more severe than had been suggested, and recommended County actions to respond to them.

Refer to: *Brown & Root Impact Study,* for Northampton County Board of Supervisors, April 1975.

Contact: Chairman, Board of Supervisors, Northampton County, Eastville, Virginia 23347

3) *Coal-fired Electric Generating Plants:* Mercer County, North Dakota

Several electric generating plants are under construction or proposed for Mercer County in central North

Dakota. The Old West Regional Commission supported an extensive report to assess the impacts on a largely agricultural area, and to determine the value of socio-economic studies. Special attention was given to existing capacities of facilities and infrastructure, and to the fiscal impacts on rural communities in the county.

Refer to: *Economic and Social Impacts of Coal Development in the 1970's for Mercer County, North Dakota,* for the Old West Regional Commission, October 1974.

Contact: Old West Regional Commission, 1730 K Street, N.W., Suite 426, Washington, D.C. 20036, (202) 967-3491

4) *Ameraport:* Mobile County, Alabama

A major deepwater port is proposed to be built in south Mobile County, Alabama. The State legislature has approved the concept and created an Ameraport Authority. Construction of the port is expected to bring offshore support facilities, oil refineries and petrochemical plants to this area. The county is concerned about the socio economic and fiscal impacts, and the conflicts possible over use of the area's farm land.

HUD's 701 Comprehensive Planning Program is funding preparation of a Development Management Plan, through the Alabama Development Office to the South Alabama Regional Planning Commission. The planning commission's work scope calls for: analyzing major influences at work, reviewing the county's capabilities and facilities, developing alternative plans, and selecting and preparing a development plan. This development management plan will have a public investments plan and program for public/private investment coordination.

Refer to: Development Management Plan Study

Contact: Executive Director, South Alabama Regional Planning Commission, P.O. Box 1665, Mobile, Alabama 36601, (205) 433-6541

Environmental Impact Statement (EIS) for Energy Projects: State and Federal Requirements

Virtually all energy projects require an environmental impact statement before they can be approved by the appropriate state or Federal agencies. States requiring an EIS on all private projects, including energy projects, are: California, Connecticut, Massachusetts, Vermont, Washington, and Wisconsin. Those with EIS requirements only in the coastal zone are: Alabama, Delaware, Hawaii, Mississippi, New Jersey and Rhode Island.

Several States have specific legislation requiring an EIS on energy projects as part of their power plant siting law: Arkansas, Florida, Maryland, Nevada and New York. In other States, the power plant siting law does not require an EIS: Arizona, Kentucky, New Hampshire, New Mexico, Ohio, Oregon and South Carolina. Other States had neither power plant siting laws or EIS requirements for power plants, as of the beginning of 1975.

Even those States – and the Federal Government – which have EIS requirements could change the guidelines for them to ensure that adequate information is available on employment, population and potential impacts for communities to start making their plans. Furthermore, local governments could develop an environmental assessment procedure for energy project impacts.

Refer to: *Environmental Impact Statements: Preparation and Review by Local Governments,* Management Information Service Report, Vol. 7, No. 6, June 1975. $5.00

Obtain from: Management Information Service, International City Management Association, 1140 Connecticut Avenue, N.W., Washington, D.C. 20036

Statewide Energy Plan: State of North Carolina

The energy plan for North Carolina, completed in 1974, includes: a quantitative description of the State's energy resources and requirements, a projection of future energy needs and uses, impact of changes in energy needs on State-wide manpower and educational needs, potential energy-related impacts on land use, and other energy related problems. The plan was funded by a HUD 701 Comprehensive Planning grant.

Refer to: *State Energy Plan for North Carolina, Final Report: State Energy Management Plan*

Contact: Office of State Planning, Department of Administration, 116 West James Street, Raleigh, North Carolina 27602, (919) 829-4131

II. MANAGING GROWTH

Improving the ability to manage growth is critical, even more important than the problems of information and money. We know that the numbers and timing of energy projects will change during planning and construction, so we have to be able to respond to that change. The response requires direction and planning and managing by the leaders of the community to get the money and to use it wisely.

A. PROBLEMS OF GROWTH MANAGEMENT

Throughout the country more and more attention is being given to "growth." How much growth can a small town or county handle? How can they pay for it? Communities of some size, with experience in planning and managing, with professional staffs and strong citizen support, are having great difficulty in managing growth. And their growth rates are far lower than those of communities impacted by energy projects.

Managing growth is difficult for energy impacted communities for a number of reasons:

- First, responsibilities are divided among many levels of government. There is great confusion about roles. Who's in charge? And who's involved? Among those involved are cities, counties, school districts, councils of governments, areawide and sub-State districts, State agencies, Federal agencies and energy companies. Within all of these there may be separate and competing bureaus and offices. There is, therefore, often no such thing as "the" Federal or the State position. The problems are further compounded when the project is in one jurisdiction and the impacts are felt in another, or when two units within an area compete rather than cooperate.
- The communities to be impacted by energy projects are typically small and remote. The most extensive survey we have was done in 1975 by the Denver Federal Regional Council of the six states in Region VIII – Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.[16] This survey found 131 communities expecting to be impacted. Of these:

  50 (38%) have less than 500 population
  66 (51%) have from 500 to 5,000 population

  116 (89%) have less than 5,000 population

  Only 15 (11%) have over 5,000 population

  Of the 131 communities, 59 (45%) have less than 1,500 persons *and* are more than 100 miles from a metropolitan area.
- Impacted communities typically have no professional staffs. Of the 131 communities above:

  12 (9%) have professional planners
  8 (6%) have full-time city engineers
  4 (3%) have city managers
  4 (3%) have other administrators[16]
- There are few formal systems for joint community/industry planning and management. Often, there is a fear of a "company town" if cooperation is too close. Industry often doesn't want to get involved in local affairs. Some construction firms feel that their only concern is building the project, not realizing that the quality of life in the community could affect their turnover, labor costs and profits.
- Sub-State areawide districts are useful in some places as planning agencies. Problems arise because they are generally voluntary, have limited money and staff, and have no authority for implementation.
- Few States have policies or plans for energy development impacts. Responsibility is often divided among many agencies with little coordination of effort. The Oil Shale Coordinator in the Colorado Governor's Office is an exception to that rule. States vary in their ability and desire to provide either money or staff technical aid to communities.
- Finally, our governmental system – for planning, managing and financing – is not geared to handling rapid and temporary problems such as the construction phase of energy projects in our communities.

The situation may be bad, but it is not hopeless. Some communities have developed an ability to manage growth, often after going through all the problems caused by being unprepared.

B. GUIDELINES FOR GROWTH MANAGEMENT

1) Determine your general goals. What kind of a community do you want when the boom has slowed down? These goals can only be set by the community as a whole, so citizen participation is required. However, don't overdo it so that citizens become weary of the process.

2) Next, specific objectives and targets must be set. "Adequate housing" is not specific. "Construction of 1,000 units by 1977, with at least one-third of them rentals at no more than 20 per cent of average industry wages" is specific. Objectives must be specific enough that progress can be effectively monitored.

3) **The most important activity you and every community must do is to prepare a plan. This "Rapid Growth Plan" or "Energy Impact Plan" has to define what impacts you expect, and set up a program and**

schedule for responding to those impacts. All activities should be tied to that Plan. With it you can hope to turn some of the negative impacts into positive benefits for all the citizens of your community.

The major elements of the "Rapid Growth Plan" include:

- Inventory of current conditions
- Analysis of expected impacts
- Organization and responsibility for managing growth
- Staffing needs and training programs
- Comprehensive land use plan
- Land use controls and enforcement program
- Capital Improvement Program
- Plans for specific services, e.g., water
- Annual budgets for operations
- Financing plan
- System for coordinating all this with other related agencies, governments and energy companies

4) **Recognize that the local governments that are going to be impacted have to take the lead in making major decisions and seeing that they are carried out.** Other agencies and levels of government can help, but they can't force their help on a community.

5) Areawide districts can be a major source of growth planning assistance. If the impacts are to be felt throughout several counties, it makes sense to combine efforts and have one staff doing the collection of information and analysis, the overall planning and coordination, securing of State and Federal funds and assigning of responsibility.

6) States can provide staffs for technical aid to communities and areawide districts. There is some advantage to staffing such agencies with people who have been through the growth experience, and thus able to provide practical advice and assistance. More than that, States could provide grants and loans to communities to help them in the initial planning for growth management. Some of this can come through State administered HUD 701, EPA 208 and Coastal Zone Management planning funds.

7) Agencies of the Federal Government may provide technical assistance and money for communities and States for growth management staffs and plans (see page 39).

8) The energy companies must be involved through the planning process. They have the greatest influence on the timing and extent of the impact, and they will have a responsibility for paying for part of the cost. To ignore them would be foolish and costly.

9) Finally, responsibility for action – in preparing plans or carrying them out – must be assigned. And those with the responsibility must have sufficient authority, money and staff.

Timeline

The Timeline on the facing page identifies the eleven major actions that constitute an effective community response to energy project impacts. The time priorities shown are illustrative only, and will vary from community to community. In essence, though, the actions are all necessary regardless of the type of energy project. This timeline indicates that perhaps 36 months – or three years – will be needed from the time of recognizing the need and implementing necessary programs. Since there may not be that much time available from the first knowledge of the project to the start of the impacts, communities must recognize the need early, plan effectively and work to compress the time schedule shown.

C. IDEAS FOR MANAGING GROWTH

The ideas for managing growth are based on actual experience. They are not magic answers, and they may not apply to your situation without modification. What these ideas are is just the imaginative use of available resources in impacted communities.

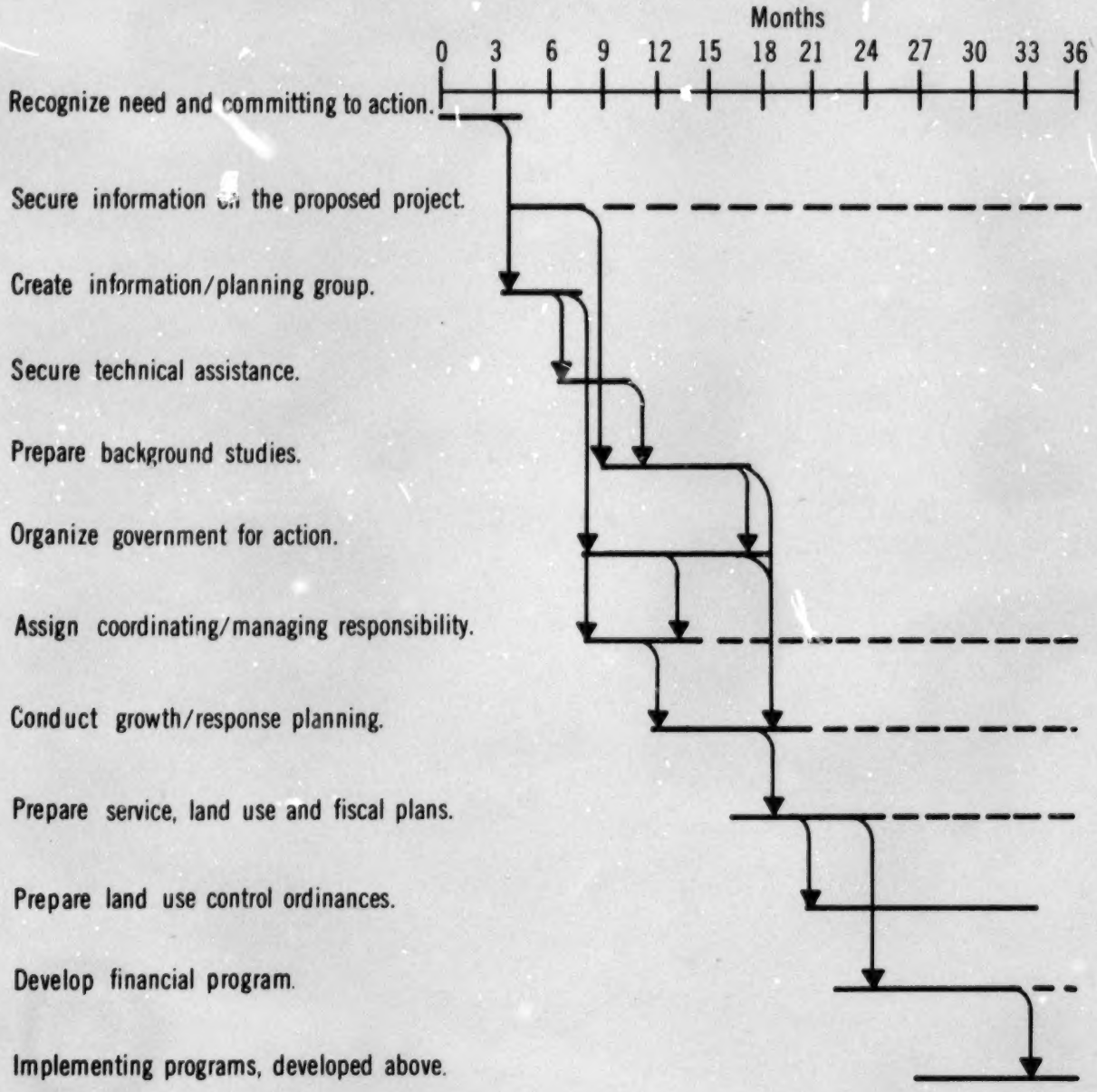
Priorities Board: Sweetwater County, Wyoming

Recognizing the need to work out cooperation between local government and industry in solving growth problems, the Chairman of the Sweetwater County Board of Supervisors, Dominic Ferraro, proposed a "priorities board." Labeled the "Ferraro Plan," the Sweetwater County Priorities Board was established in 1974 on authorization of the county and the Cities of Rock Springs and Green River.

The purposes of the board are to: provide regular communication between local government and industry, analyze problems and recommend priorities for their solution, work out proposals for industry help in solving boom problems, and (long-range) move toward economic self-sufficiency for local government. Membership consists of: the chairman and one other county commissioner, the mayor of each of the five cities in the county, one representative from each school district, four representatives of industry (recommended by the Southwest Wyoming Industrial Association), and two members selected at large. The board invites observers from State agencies to its bi-monthly meetings. It is aided by a citizens' advisory committee and a technical committee.

One problem the Priorities Board has is the lack of full-time professional staff (and there is only one professional administrator within the County). The Industrial Association has a full-time director (see page 9), so the elected officials are at some disadvantage in providing appropriate liaison.

Figure 5
TIMELINE FOR ACTION
Response to Energy Projects


Months
0 3 6 9 12 15 18 21 24 27 30 33 36
Recognize need and committing to action.
Secure information on the proposed project.
Create information/planning group.
Secure technical assistance.
Prepare background studies.
Organize government for action.
Assign coordinating/managing responsibility.
Conduct growth/response planning.
Prepare service, land use and fiscal plans.
Prepare land use control ordinances.
Develop financial program.
Implementing programs, developed above.

Contact: Dominic Ferraro, Chairman, Sweetwater County Board of Commissioners, Court House, Green River, Wyoming 82935, (307) 362-2830

Growth Management Process: Kaiparowits Planning and Development Commission

Southern California Edison and three other energy companies propose to build a 3,000MW coal-fired electric generating plant on the Kaiparowits Plateau in Southern Utah. Over 2,100 permanent employees will be hired, possibly adding 15,000 to 20,000 persons to the community. (Garfield County to the north will also feel some impacts.) Since Kane County has only 2,400 residents now, and the nearest town is over 50 miles away, a new town is proposed.

To create a comprehensive and coordinated planning process, the Governor of Utah formed the Kaiparowits Planning and Development Commission (KPDC) by executive order in 1974. Such a commission had previously been proposed by local officials. KPDC has taken the lead in a manpower effort to train local youths for jobs. A major effort has been a new town study, done by consultants and funded by the energy companies.

Staff assistance is provided by the executive director of the Five Counties Association of Governments, which includes Kane and Garfield Counties. The chairman of the Kane County Board of Supervisors is Chairman of KPDC, and the chairman of the Garfield board is Vice-chairman. Voting members in addition are: State senator, State representative, Governor's appointee, Federal agency representative, and a representative of the steering committee. The 19 ex-officio members include the remaining county commissioners; representatives of State, Federal and school agencies; chairman of the citizens' advisory committee; and project manager for the energy company.

Reference: *NACO Case Study on Kaiparowits New Town Project,* (see page 38).

Contact: Neil Christiansen, Executive Director, Five County Association of Governments, Post Office Box Zero, St. George, Utah 84770, (801) 673-3540

Areawide Districts: Lewis and Clark 1805 Planning District, North Dakota

Much of the initial impact from current energy development in North Dakota will come in the Lewis & Clark 1805 Planning District, which consists of the counties of Mercer, Dunn and Oliver. None of the counties has a professional manager, so much of the planning for growth is being done by District staff.

To aid in creating a District Plan, the Old West Regional Commission has given the District a two-year grant of $301,000 to hire administrative and financial staff. The plan will rely heavily on the findings of studies such as the socio-economic and fiscal impact study of Mercer County, which was also paid for by the Old West Commission.

Contact: Energy Office, Old West Regional Commission, Room 306A – Fratt Building, Billings, Montana 59102, (406) 245-6711, ext. 6665

University Consulting Group: Utah State University

Utah State University established the Energy Development Consulting Group (EDCG) to provide technical support to rural communities facing boomtown problems. The group consists of several University staff members, with one professional full-time.

EDCG signs individual agreements with local governments, typically for one year. A full-time person is assigned to the local government, which pays his salary. EDCG provides support from the University. EDCG is currently providing consulting services to the Uintah Basin Council of Governments, at Price, Utah.

The consulting service goes through four phases:

1) Seminar phase – identifying problems and objectives;
2) Education – public involvement;
3) Strategy Development – alternative plans for discussion and decision by local officials;
4) Implementation – may involve grant application writing by EDCG

Contact: Edward H. Allen, Political Science Department, Utah State University, Logan, Utah 84322, (801) 752-4110, ext. 7829

State Consulting Services: State of Pennsylvania

The Pennsylvania Department of Community Affairs (DCA) was created in 1966. Its Bureau of Local Government Services has three divisions. The Information Service Division maintains a reference library, publishes manuals, operates a hot line for inquiries, and puts out a monthly magazine and other publications.

The Division of Municipal Consulting Services provides direct consultative advice and assistance in the basic functions of local government, e.g., public works and finance systems. State staff consultants may prepare in-depth studies if needed. Services are provided to cities, towns, counties and councils of government. The Municipal Training Division runs the local government element of the Intergovernmental Personnel Act regional personnel centers for training courses, and

provides trainers directly to local governments. This division uses its own staff and hires local officials and consultants.

Contact: Bureau of Local Government Services, Pennsylvania Department of Community Affairs, 117 South Office Building, Harrisburg, Pennsylvania 17120 (717) 787-7148

Project Coordinator: Kitsap County, Washington

The Navy's decision to locate its Trident Submarine Base at the existing Bangor Naval Reservation will increase rural Kitsap County's population by 50 per cent in the next ten years. This County is already the site of the Puget Sound (Bremerton) Naval Shipyard, located an hour's ferryboat ride west of Seattle. Although this defense base is not an energy project, the methods used to plan for and cope with rapid growth can be used by any community.

The Kitsap County Commissioners realized that the Trident Base provided an undeniable economic opportunity for the County, but that it also could create serious problems for local government. Difficulties in providing services were anticipated. It was not clear how elected officials could guide development without jeopardizing the highly valued quality of life.

The Kitsap County Trident Coordinating Committee consists of elected officials of Kitsap and two adjacent, also impacted, counties; cities within the County, and school districts; plus citizens representing environmental, labor and public interest groups. This committee is designed to be the over-all coordinating group for Trident impact.

To assist the committee, the Commissioners hired a Trident Coordinator who reports directly to the board. He is assisted by a community development coordinator. This office is funded by EDA (Economic Development Administration) and the State of Washington with county matching monies. The 701 Comprehensive Planning Program is also actively supporting this project. The functions of the Trident Coordinator are to:

- Coordinate review of the project EIS
- Seek Federal assistance to offset local burdens
- Seek state assistance
- Provide liaison with the Navy's Trident managers
- Serve as a focal point for public opinion
- Identify areas for study and research
- Provide advice and support to elected officials
- Inform the public on issues and effects of actions

The office will probably be phased out at the end of the construction phase. To assist in securing funds for public services and facilities, Trident Task Force includes representatives of the Federal Regional Council, State, council of governments, economic development district and County Board. Technical Advisory Committees were appointed in 22 functional areas to review the EIS, assess needs, plan, seek funds, and assign responsibility. The citizens of Kitsap County are heavily involved.

Contact: John C. Horsley, Trident Coordinator, Kitsap County, 614 Orchard Street, Port Orchard, Washington 98366, (202) 876-4441, ext. 222 & 227

Administrative Officer: Cities and Counties

Many cities, counties and councils of government throughout the country provide full-time professional administrative assistance to their elected officials by the appointment of an administrative officer or manager. This professional assistance in the management of growth is not limited to large cities and counties. Of the 2,533 cities with administrators in the United States, over one-half (1,301) serve cities under 10,000, and 303 of these are in cities under 2,500 population.

Several counties under 2,500 population have administrators. In addition, a large number of jurisdictions have assistants to mayors (such as Green River, Wyoming) who provide growth management capabilities. In small communities, the administrator could also provide aid in finance, personnel and planning. In several States, "circuit-riding" administrators serve two or more small communities. Examples of administrators in cities and counties impacted by energy development (with 1970 population) include:

Alaska:	Fairbanks (14,770), Valdez (1,005)
Colorado:	Grand Junction (20,170), Rifle (2,150)
Maryland:	Calvert County (20,700)
Maine:	Eastport (1,989)
Montana:	Petroleum County (675)
Utah:	Vernal (3,908)
Wyoming:	Casper (39,361)

Contact: Administrators of any of the above jurisdictions,

OR

Membership Services Director, International City Management Association, 1140 Connecticut Avenue, N.W., Washington, D.C. 20036, (202) 293-2200

"Thou shall not naively believe that things can be completely controlled once development starts."

– Joe C. Mosely, Executive Director
Texas Coastal and Marine Council

22

III. LAND USE AND HOUSING

Land use and housing cannot be separated, for the worst land use problems in energy impacted communities come because of lack of housing. In this chapter the problems of land use planning, and the impacts of housing, are presented – along with guidelines for action and experiences of impacted communities.

A. PROBLEMS IN LAND USE PLANNING

A number of general statements can be made about land use planning in communities impacted by boom growth:

- First, there is a general absence of plans for land use. The Denver Federal Regional Council survey showed that only 42 (or 32 per cent) of the 131 communities surveyed had comprehensive plans, with 13 of these developed prior to 1970.
- Some plans are not effective because they are based on outdated information.
- Where plans exist, they seldom are backed by land use controls. The same Denver Federal Regional Council survey of 131 communities found:
  - 45 (34%) with sub-division regulations
  - 52 (40%) with building codes
  - 60 (46%) with zoning ordinances
- Even those communities with land use controls may not have effective enforcement. Enforcement of land use controls is difficult even in stable circumstances, but boom conditions place extreme demands on small staffs.
- Specifically, mobile home standards and standards for mobile home parks are virtually unknown in the small communities most likely to be impacted. The regulator's task is made more difficult when it is not known if mobile home parks are to be for permanent or temporary use.
- In some instances, planning and land use controls are difficult to work out when the energy project is in one jurisdiction and the impact in another. For example, many of the employees of the Decker Mine in Montana live across the border in Sheridan, Wyoming.
- Planning may be more difficult when Federal land is involved. The regulations of such agencies as the Bureau of Land Management may require unfamiliar actions on the part of prospective developers. The new town required for the Kaiparowits project will have to go on BLM land. Acquiring the site and controlling activity in the vicinity are hindered by regulations which are not geared to creating communities.
- Finally, perhaps the toughest problem related to the difficulty is building new single and multi-family housing. It takes time to get subdivision and zoning approvals. The prices of land, materials and labor are high. Financing is difficult as there is skepticism about the permanence of the boom. And in one community, a home builder could not come in because there was no place to house his workers!

B. HOUSING IMPACTS

Housing problems are often the first negative impacts of rapid growth to surface in a community. With the start of construction, the workers are mostly alone. They live in motels, apartments (if available) and all the vacant houses in the area. As workers come in for longer stays, they bring their families. Some construction workers own their mobile homes, moving from job to job. But for others, the mobile home is forced on them because there is no other alternative.

In Sweetwater County in 1974, according to Denver Research Institute, 31 per cent of all households were in mobile homes. Mobile homes were only seven per cent of the housing in Rock Springs, but 81 per cent in the rural portion of the county. Of newcomer career construction workers, 77 per cent live in mobile homes (two-thirds of them own and one-third rent). In Campbell County, Wyoming, about 40 per cent of residents live in mobile homes, in 68 mobile home reservations. Most of these are in the county, beyond the controls of the City of Gillette.

The mobile homes in squalid fringe settlements have been called "aluminum ghettos." Adverse impacts seldom involve the mobile homes themselves, but rather the scattered locations, the lack of laundry and recreation facilities, the dirt paths and lack of trees, and the isolation for wives and children.

The heavy and rapidly increasing demand, linked with a small and limited supply of housing, always results in an increase in prices for housing and lots and in rents. Within one year, the price of a lot in Valdez, Alaska went from $450 to $10,000. Generally, the prices of lots and houses double during the course

of construction, while the rents for housing double or triple.

C. GUIDELINES FOR LAND USE AND HOUSING

In dealing with the problems of land use and housing, the following points could serve as guidelines for communities:

- The planning process will be useful to the community no matter what happens. If the project is not built, or is radically different, the plans themselves may not be useful. But identifying community problems and resources, setting goals and objectives, adopting land use controls and setting up a system for cooperation will be of long-lasting value.
- For most projects, the employment and population of the construction phase is higher than for the operating phase. Permanent housing and facilities should be provided only for the level of population expected after the project is built, and not for the construction phase. Mobile homes should not be denounced, but accepted as the logical way to provide temporary housing. Attention should be directed to the improvement of mobile home and mobile home park standards.
- Temporary facilities and services should be utilized for the construction phase whenever possible. Package sewage treatment plants and module school classrooms, contracts with State agencies for temporary staff, and other short-term solutions should be considered.
- Added growth may be accommodated in several ways:
  a) growth in existing communities – there are numerous examples of this. Often this result just happens, but it was a conscious decision in the Shetland Islands – to disperse project workers among present residents and improve the towns;
  b) create a new town – this may be required when the project is remote from existing communities. New towns are now proposed for several current projects, but none has been created to date; New towns are very hard to plan and finance, but the end result may be a superior product;
  c) build a company town – this was the practice for many coal and mining projects in the past, but is not common today.
- Land use and housing elements are required of all HUD 701 Comprehensive Planning Program grantees to be eligible for funds in and after 1977. This planning should be coordinated at the areawide (sub-state) district level with the plans of all cities and counties within the district. Furthermore, it is intended to include and coordinate with the planning efforts going on at the same time funded by the Environmental Protection Agency (208 wastewater planning) and by the Office of Coastal Zone Management.
- Land use controls to be considered include: zoning ordinances, planned unit development, sub-division controls, mobile home park standards, growth boundaries, and service areas for water and sewer.
- Recognize that it may take one year to plan and another year to pass the appropriate ordinances for land use control.
- Land use controls are useless without enforcement, which requires adequate staff and money.

D. IDEAS FOR LAND USE AND HOUSING

While many impacted States and communities have had serious problems with land use and housing impacts, there are examples of actual experience which may be useful. As with all the ideas in this publication, these may need modification to fit the situation of your community.

State Plans: Council of State Governments

With increasing concerns over the preservation of environmentally sensitive areas, the management of growth and need to produce and conserve energy, States are becoming more involved in creating State plans. These plans generally focus on issues of statewide, or more than local, interest and concern. A State plan often includes the following elements:

- Growth statement or policy, by the Governor or Legislature;
- Collection of data, determining the environmental, characteristics of the land and water, and the social and economic characteristics of the people;
- The concept of "carrying capacity," determining the ability of land, air and water systems to support population and economic activity;
- The setting of overall development criteria, and assuring that local government powers fit into a comprehensive development plan;
- Equitable implementation and financing systems.

A comprehensive study of State growth and land use policies and plans – present and potential – has recently been completed by the Council of State Governments, Task Force on National Resources and Land Use Information and Technology, for the Department of the Interior.

Reference: Final Report, *Land: State Alternatives for Planning and Management* (No. RM-549) $4.00.

Contact: Council of State Governments, P.O. Box 11910, Iron Works Pike, Lexington, Kentucky 40511, (606) 252-2291

State Plan: State of Florida

In response to a severe drought in southeastern Florida in 1971, the State enacted a package of laws that together make up a growth policy. Florida chose a selective approach that focuses on the big decisions where there is regional or state-wide significance either because of the development's size or type, or the site's environmental values.

The four pieces of legislation include:

- The Environmental Land and Water Management Act of 1972
- The Land Conservation Act of 1972
- The Water Resources Act of 1972
- The Florida Comprehensive Planning Act of 1972

This legislation is essentially a modification of the American Law Institute's Model Land Development Code. The Florida approach consists of two major parts:

- "critical areas," so designated because of environmental resources of regional or state-wide importance, of effects on major public facilities or investments, or of an area of major development potential;
- "development of regional impact," which is any development which, because of its character, magnitude or location would have a substantial effect on the health, safety or welfare of more than one county.

Designation and review is an initial responsibility of local government and regional planning agencies, but the State has the powers of ultimate review and override of approval decisions.

Contact: Florida State Department of Community Affairs, 2571 Executive Center Circle East, Tallahassee, Florida 32301, (904) 488-8466.

Comprehensive Plan: Salem County, New Jersey

Located in the Southwest corner of New Jersey, Salem County has been primarily agricultural, with some heavy industrial development along the Delaware River. Growth has been slower than the State or region as a whole. The rural setting, the availability of water and the closeness of metropolitan areas have combined to make Salem County a prime site for nuclear power plants. Four power plants in total are under construction or proposed, of about 1160 megawatts each, to be located on Artificial Island in the Delaware River.

Salem County has been quite well prepared to consider the potential impacts of these nuclear plants and the population that might result from construction and operational employment. In 1970, the County prepared and adopted "A Plan for Comprehensive Development," including all the area within the municipalities of Salem County. The major elements of the plan include the following:

- Potential Development Alternatives: unrestricted growth, existing zoning, designed growth and environmental growth;
- Mapping of the physical environment: geology, soils, ground water, surface water, and ecosystems of vegetation, wildlife and habitat;
- Consideration of the social environment: settlement history, population characteristics, land use and economy;
- Projections of future economic activity and population;
- Setting of goals and policies;
- Determination of land capabilities for: urbanization, open space and agriculture and a composite suitability;
- Comprehensive development elements: transportation, sewer and water, land use patterns, zoning, government organization, and facilities and services, culminating in a comprehensive development plan.
- Implementation methods and processes.

Refer to: *A Plan for Comprehensive Development — The County of Salem*

Contact: Salem County Planning Board, Court House, Salem, New Jersey 08079, (609) 935-4477

Growth Phasing: Navajo New Town

If more than one project is proposed for a community, it may be difficult to develop land use plans. The extent and timing of growth are unknown. For example, the new town proposed for the Navajo Reservation for employees of coal gasification plants could have as few as 3,300 residents if it served one plant, and over 60,000 if it served the seven which have been discussed.

The proposed new town at whatever size had to meet a series of multiple objectives. It was to be designed to serve first construction workers, and, later, permanent workers and their families. It was intended to grow rapidly, but balanced at any stage of development. Flexibility in accommodating changes in racial mix, family size, and new industry, and attractiveness to both Navajo and non-Navajo employees were additional requirements. The planning consultants created

a concept of growth and regeneration, involving incremental modular growth. (Figure 6). Neighborhoods of 1,500 population would be combined to make communities of 4,500, with three of these making up a village of 13,500.

City building would start with Community 1, which may be mobile homes in the construction phase, and move on to 2 and 3. As growth is added in later villages, decisions can be made – based on conditions at that time – whether to add new communities and villages, or to convert the earlier ones from temporary to permanent housing. Early communities could even be built with the intention of rapid phase out, rather than permanence.

Contact: Terry McCollister, El Paso Energy Resources Company, 3535 East 30th Street, Farmington, New Mexico 87401. (505) 325-2841, ext. 502

Temporary Mobile Home Parks: Page, Arizona and Green River, Wyoming

Construction of the Navajo Generating Station by Salt River Project brought 2,700 workers at peak to Page, Arizona. Because the town had declined from an earlier boom in building Glen Canyon Dam, the company assumed that vacant housing would be available. When the influx took all available housing and occupied all mobile home spaces, the contractor (Bechtel Corporation) and Salt River Project built a temporary mobile home park of 750 spaces, for construction workers and school teachers. The park is located on land leased from the Bureau of Reclamation. All utilities are provided, as well as laundry and recreation facilities. The fee is "break-even" for the companies. Most units are individually owned, although Bechtel bought some units for key personnel. This mobile home park is designed for a short-term. The Bureau of Reclamation gave a five-year, no extension lease. At the end of that period, the park must be closed and the area returned to its natural state.

Contact: Paul Winter, Personnel Supervisor, Salt River Project, Navajo Generating Station, Page, Arizona 86040. (602) 645-2582

In Green River, Wyoming, the new housing development of Upland Industries has an unusual feature. On 250 lots of a permanent subdivision, the City is permitting two mobile homes on each lot for a maximum of three years. At that time, mobile homes must be removed, with the developer intending to build permanent housing. Even the school here is temporary, in modular buildings until permanent ones can be built.

Contact: Roger A. Zanarini, Director, Real Estate, Research and Planning, Upland Industries Corporation, Suite 1200 – One First National Center, Omaha, Nebraska 68102. (402) 271-3189

Mobile Home Regulations: Rio Blanco County, Colorado

In preparation for the projected impacts of oil shale development, the counties of Western Colorado are planning and adopting land use controls. (See the item on the Colorado West Council of Governments, page 10). Rio Blanco County just adopted countywide zoning in the late 1960's. This year it adopted new regulations for mobile homes.

The mobile home regulations provide for:

- A maximum of 5.5 mobile homes per acre;
- Restriction of mobile homes to mobile home parks (no single-lot development)
- Requirement that parks have 20 per cent open space;
- Provision of 1000 gallons of water per unit per day (intended to promote landscaping);
- New mobile home parks (as a matter of policy) will be allowed only within a three-mile range of existing cities.

The County has also adopted a mobile home park operators ordinance.

Contact: Duane Rehborg, Planning Director, Rio Blanco County, P.O. Box 599, Meeker, Colorado 81641. (303) 878-5081

Mobile Home Park Standards

The Manufactured Housing Institute (formerly the Mobile Home Manufacturers Association) has prepared a Community Planning Packet. It contains an introduction to mobile homes, to standards and trends in the 50 States, and to the development of mobile home communities. Major components of the free package include:

- "Suggested Model Ordinance Creating Residential Mobile Home Districts;"
- *Environmental Health Guide for Mobile Home Communities,* with a recommended ordinance. Prepared in cooperation with the Public Health Service, HEW.

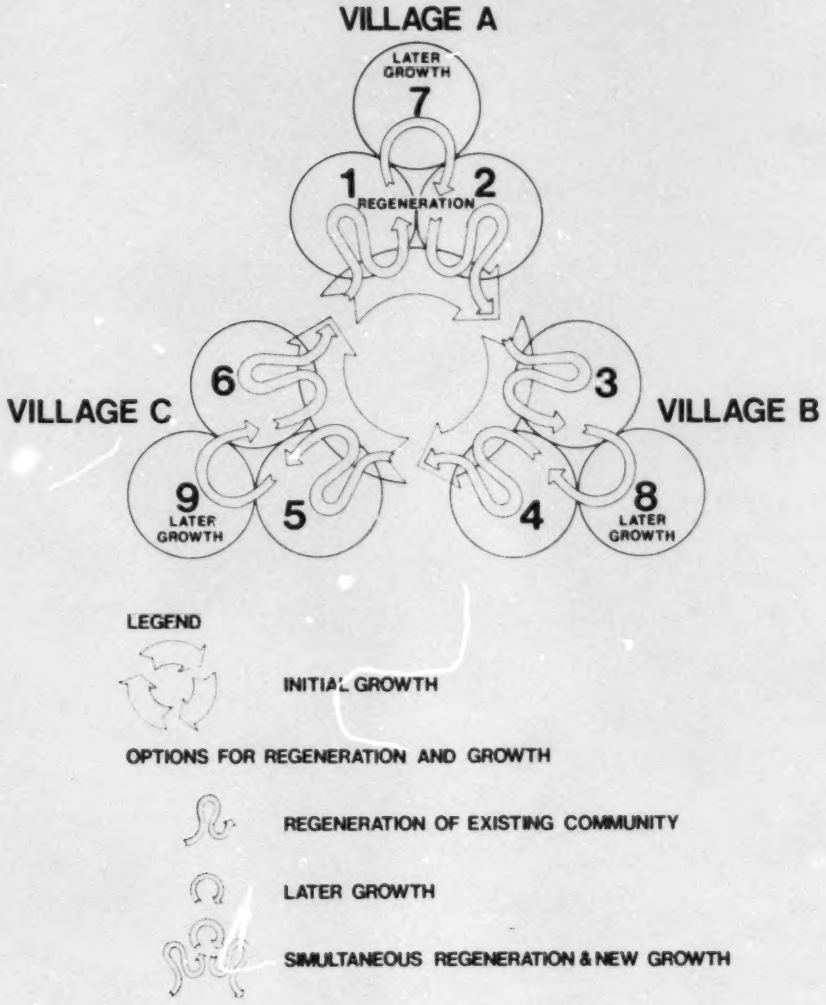
Obtain from: Land Development Division, Manufactured Housing Institute, P.O. Box 201 – 14650 Lee Road, Chantilly, Virginia 22021. (703) 968-6970

The Federal Housing Administration of HUD has developed planning and construction criteria for mobile home projects, especially those funded under Section 207 of the National Housing Act. Sections of the HUD/FHA Handbook cover general acceptability criteria, site planning and improvements, planning permanent structures, structural standards, and utilities.

Refer to: *Minimum Design Standards for Mobile Home Parks,* HUD Handbook 4940.5.

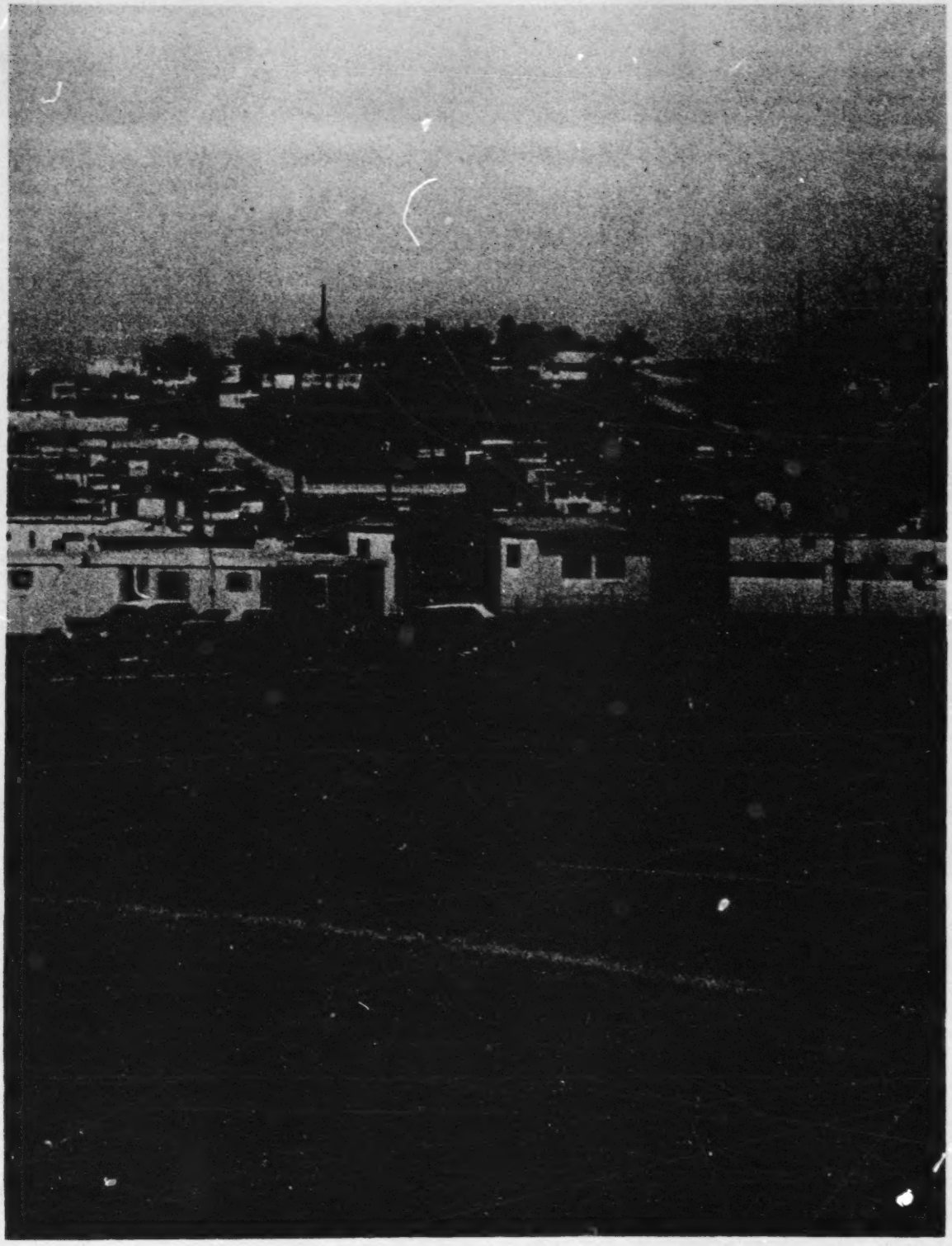
Obtain from: HUD/FHA Insuring Office, listed on Inside Back Cover.

GROWTH AND REGENERATION



DEVELOPMENT SEQUENCE I

Courtesy of El Paso Energy Resources Company



IV. OTHER IMPACTS ON THE COMMUNITY

The boom resulting from the construction of an energy project can cause impacts far beyond the visible ones of land use and the countable ones of finances. In this chapter, we discuss the impacts on:

- Quality of Life
- Service to People
- Streets and Utilities

These impacts are not mutually exclusive from each other, or from those discussed in the previous chapter. In fact, they are all so interrelated that they cannot be considered by themselves. For example, ideas to improve services to people will improve the quality of life, and land use planning will make easier the provision of streets and utilities. The problems and ideas for action presented here are only the highlights, and not by any means inclusive. The extent of impacts and the *proper* response depend entirely on the people of the community, and thus vary from one area to another.

A. QUALITY OF LIFE

Rapid growth brings rapid change in the many factors that are summarized by the average citizen under the heading of "quality of life." Whether change is for the better or worse depends on one's subjective judgment. Many accounts of impacted communities have stressed "decline" and "loss" and the negative effects are often in evidence:

- A speeded-up pace of life
- Congestion and overcrowding
- Inflation in prices
- Fear of change in life style for present residents
- Lack of activities and belonging for newcomer families
- Alcoholism and mental health problems

But at the same time, more people can provide the basis for more opportunity. The balance is one that each community must strike in its own way.

The impacts are especially severe on two groups:

Elderly:

Most of the elderly have been in the community for a long time, and counted on a quiet retirement in a community they knew. With the rapid growth, the community is no longer quiet and may not be recognizable. Many elderly are on fixed incomes, so the inflation in rents and prices hits them especially hard. If they are renting, it may no longer be possible for them to remain in their community.

Wives:

Boom towns are often not good places for wives. The wives of construction workers are mostly living in "aluminum ghettos" on the fringe of urban settlement. There are few jobs for women in construction work, and the support jobs don't increase as fast as the population. Activities – educational, social and cultural – are limited, and there may be "culture shock" for those who moved from large urban centers. Schools may be crowded and recreation limited for their children.

To meet some of these problems, several ideas have been advanced. Community responses in the area of quality of life have been quite limited, with few examples available for presentation.

Community Relations Commission: Denver Research Institute

In its study of Sweetwater County, Wyoming, the Denver Research Institute suggested that the county might consider funding a community relations commission. Citizen advisory committees would examine new approaches to improving life in the county. Among the potential ideas are:

- Telephone referral service for information on available social and governmental services;
- Company sponsored orientation sessions, and educational, cultural and social activities;
- Coordinated membership drive of all volunteer organizations in the county.

Community relations commissions, welc[illegible]wagons, hospitality hostess programs are always good buffering mechanisms, easing the entry of new households into a community. This may be particularly important in the rapid growth community.

Contact: Jack Gilmore, Senior Research Economist, Denver Research Institute, University of Denver, Denver, Colorado 80210. (303) 753-3207

Recreation/Activity Center: Gillette, Wyoming

One of the major needs for wives is a place where they can get out of the mobile home and engage in activities together. Gillette has built such a center, opening it in early 1975. The $1 million center includes a recreation area, exercise room, arts and crafts room, classrooms, day-care center and an outdoor swimming pool which can be enclosed in the winter.

This facility has been built and is operated by Campbell County to serve all the residents of the area. A Federal grant from the Bureau of Outdoor Recreation helped. A small fee is charged for swimming and

for the day-care center, but the County subsidizes much of the cost.

Contact: Director, County Recreation Center, 1000 Douglas Road, Gillette, Wyoming 82716. (307) 682-7406

Counseling Centers: State of Wyoming

Social services can be a serious problem in boom communities. Wyoming has seen increases in alcoholism, divorce and mental health cases. To assist with these on the individual and family level, the State has set up regional counseling centers throughout the State. These centers are staffed by psychiatrists, psychologists and social workers. Funding is provided by the cities and counties within the region, matched by the State, with some Federal support from HEW.

Contact: ElDean V. Kohrs, Clinical Director, Central Wyoming Counseling Center, 504 South Durbin Street, Casper, Wyoming 82601. (307) 237-9583

Jobs for Women: Nowhere

In larger, more balanced communities there are jobs available for women. Boom towns don't have those opportunities. Little attention has been given to creating more jobs for women, which might involve:

- Opening up jobs at the energy projects in both construction and operations to women, rather than the male exclusiveness of most projects. Women drive heavy equipment at the Jim Bridger Power Plant and mine coal elsewhere;
- Expanding the secondary jobs by attracting more retail and service business to the community;
- Training programs to prepare women for jobs, and day-care centers to allow them to work. The Gillette Recreation Center has a day-care center, but rapid growth communities will need far more than just one day-care facility. Energy companies might consider them for their employees.

B. SERVICES TO PEOPLE

Human services program capabilities – medical, education, recreation and public safety – are often overburdened by the rapid growth rate. Expansion of these services always lags behind the influx of people even in more stable times. It is difficult to recruit professionals to small, remote communities. Taxes generally lag behind growth, making it hard for local governments to build new classrooms and recreation facilities. Wage competition from the energy project may make it hard to retain needed employees.

Medical services suffer the most. In only a few years, the same number of doctors may be trying to handle doubled loads. Many people, then, have to go outside the community to get even routine care. Extra loads are placed on hospitals.

School impacts will vary depending on the rate at which workers relocate their families in the area. In Calvert County, for a nuclear power plant, only 250 students were added when peak construction hit 2,500 workers. In most coal areas, there will be about one new student for every new worker. Overcrowding and double sessions will result. School taxes will have to go up, at least until the energy project is on the tax rolls. Recruiting teachers is not as difficult now as it has been because of declining opportunities elsewhere.

In small and rural communities, the recreation has been provided by the great outdoors. New residents are often used to a more urban type of service: parks and recreation centers. With all the other demands on local government, these are given low priority. Those most hurt are women and children in mobile homes.

With the rapid growth, crime rises. Urban standards of crime, law and order are transferred to the rural setting. Police forces used to a quiet community are hard-pressed to deal with the influx. Police forces are often left short-handed as officers leave to go to work in the projects and mines. Volunteer fire companies may have problems dealing with scattered mobile homes and large commercial buildings.

Ideas for improving services to people include the following:

Wyoming Human Services Project

The purpose of the Wyoming Human Services Project is to train students in their final year of course work at the University of Wyoming (at both undergraduate and graduate levels) to work in multi-disciplinary teams in Wyoming communities for a period of one year after graduation. They are then salaried professionals working in such areas as mental health, social services, law, recreation, day-care, public health, education and public administration.

The training part of the program covers two semesters plus a summer training session in the field. Courses are taught by University faculty with local community and State representatives. The training program is supported by a five-year $478,000 grant from the National Institute of Mental Health (HEW). The first community being served by this project is Gillette, Wyoming. (See page 53.)

Contact: Dr. Julie (Marty) Uhlmann, Project Director, Arts and Sciences #310, University of Wyoming, Laramie, Wyoming 82071. (303) 766-6318

Recruitment of Doctors: Sweetwater County, Wyoming

One important way industry can help during a boom is to provide help in areas that are not traditionally the role of local government. The Southwest Wyoming Industrial Association is helping both Rock Springs and Green River recruit doctors. The Green River Chamber of Commerce has a $75,000 loan, guaranteed by SWIA, which is being used to set up an internist in private practice and two general practitioners provided by the National Health Service Corps (see page 45).

A grant of $43,000 has been given to the Rock Springs Health Maintenance Organization for the expenses of recruiting. One additional doctor has arrived, and a specialist is being sought. A $101,000 loan guarantee is providing a modular clinic and front-end money for the HMO.

Contact: Ernie Mecca, Executive Director, Southwest Wyoming Industrial Association, 638 Elias Avenue, Rock Springs, Wyoming 82901. (307) 382-4190

Parks at Project Sites: State of Maryland

In its program of acquiring sites for energy projects (see page 10), the State of Maryland will often acquire more land than is needed for just the facility itself. For example, at Bainbridge, Maryland, the Power Plant Siting Program is negotiating with the Federal Government to obtain an unused military site. The State will use part of the site for power plant purposes, and share the remainder with the county for park/recreation and institutional uses. An industrial park is possible, and a portion may be used for a new sewage treatment plant.

Contact: Director, Power Plant Siting Program, Department of Natural Resources, State Office Building, Annapolis, Maryland 21401. (301) 267-1261

Purchase State Police Services: Calvert County, Maryland

Contracting with other governmental agencies for temporary services is an established practice in some States. This strategy of "renting" needed personnel and facilities rather than purchasing them can be used in any number of situations – e.g. police, schools, building inspection.

Most of the workers at the Calvert Cliffs Nuclear Power Plant continued to live in nearby metropolitan areas and drive to the plant site. Traffic was a big problem for Calvert County. The road to the site was only two-lane and heavily congested at shift change. In addition, all the extra people in the County added to the police service needs.

Knowing the traffic impacts would be temporary, the County did not want to add people to its payroll permanently. So it contracted to pay the State of Maryland to assign three additional State troopers to Calvert County. The county pays all the cost of these extra officers, and the contract can be ended when the construction phase is complete.

Contact: Jack Upton, Administrative Officer, Calvert County Court House, Prince Frederick, Maryland 20678. (301) 535-1600

Health Maintenance Organization (HMO)

An HMO is set up as either a private or non-profit corporation to offer pre-paid health care. A set monthly fee provides every medical service needed. The HMO emphasizes preventive medicine and does not require hospitalization before it pays for physicians' services.

Sweetwater Health Services, Inc. has been set up by local physicians to serve the critical medical needs of the Rock Springs/Green River Area of Wyoming. It has been aided by the Southwest Wyoming Industrial Association. Energy companies could also aid the creation of an HMO by endorsing it and offering it as an alternative form of health insurance to workers and their families. Labor unions, as a source of medical programs to their members, should be involved in planning and implementing health maintenance organization.

Federal assistance is available to help set up an HMO. The program of the Health Services Administration of HEW is described on page 41.

Fire Protection: Mobile Home Standards

The greatest pressures put on fire services will come in three areas:

- The same loss of personnel problem that police services face;
- scattering of housing, making response time longer;
- potential fire safety hazards from mobile homes.

Higher salaries may help retain personnel. Certainly land use planning will reduce the scattering of housing, allowing present fire stations to better serve new housing. A most important factor, however, is the adoption of standards – at the State level – for mobile homes. All but four States – Hawaii, Rhode Island, Vermont and Wyoming – require that all mobile homes sold within their borders be built to the standards established by the National Fire Protection Association (NFPA 501 B) and the American National Standards Institute (A 119.9)

Contact: Manufactured Housing Institute, P.O. Box 201 – 14650 Lee Road, Chantilly, Virginia 22021. (703) 968-6970.

C. STREETS AND UTILITIES

Streets are affected in two major places: the road to the energy project from the community, which may involve State and county roads, and the streets within communities themselves – a local responsibility. The energy project road can become quite congested at shift changes. One response by energy/construction companies might be to stagger shift hours.

Sewage systems can quickly become overloaded during project construction. How much so depends on the capacity and quality of the existing system. For many small communities, the existing system was not adequate for the pre-project need, and some relied on primary treatment or just septic tanks. Health and water pollution regulations would make them build new systems. In the meantime, there is little excess capacity for newcomers. Lack of this capacity can hinder the building of new housing, and the use of septic tanks will lead to scattered development on the fringe of communities.

Unless there is a severe problem of water quality, expansion of the water system is usually easier than for the sewage system. Revenues are generally available from the sale of water to finance the project. Moreover, the water system often just needs expansion, not a major change in the quality of the service.

Companies providing electricity, natural gas and telephone service also have problems coping with rapid growth. These services are generally provided by private utilities, regulated at the State level. Close planning and cooperation may be required to assure adequate and timely supply, and the maintenance of reasonable rates. Solid waste disposal is usually not a serious problem in rural areas, for disposal sites are available.

Here are a few ideas for action:

Construction Bus System: Idaho Falls, Idaho

Transit solutions can be implemented in many ways. Systems can be financed, either solely or in combination, by private enterprise (employee changes), employers, and public agencies.

In the early 1950's the Atomic Energy Commission built the National Reactor Testing Station about 50 miles west of Idaho Falls, Idaho. No workers live on the site. About 70 per cent of all employees live in Idaho Falls; another 15 per cent live in Blackfoot, Pocatello and Arco. Idaho Falls is considered attractive because it is a large (38,000 population) community with well developed housing and community services.

The NRTS has about 6,000 operating employees. A large percentage of them ride to work from the four major communities on the more than 100 buses owned and operated by the contractor for the Energy Research and Development Administration. The employee pays 50¢ per round trip for the bus service, with the employer subsidizing the balance. This service cuts automobile traffic and employee costs.

Contact: Transportation Division, Idaho National Energy Laboratory, 550 2nd St., Idaho Falls, Idaho 83401. (208) 526-2315

Traffic Improvements

The road(s) leading to the energy project may be inadequate when construction begins. Improvement during the construction of the energy project may only make the congestion worse. Improvement should come *before* construction. If this is not possible, it could be delayed until after the energy project is complete.

In the meantime, the congestion can be reduced and the highway made safer by: traffic signals, striping, safety lighting, extension of shoulders, surface coating, periods of one-way traffic, commuter buses, and intensified patrol. Funding for these improvements could come from the State highway fund, the energy company and local street funds.

Package Sewage Treatment Plants: Green River, Wyoming

A 640-acre project is under construction in Green River with a combination of single-family houses, apartments and a temporary mobile home park. The Green River sewage treatment plant is at capacity. The City has an EPA grant to build a new one, but the time to do so would greatly delay the housing project.

The City has allowed the developer to put in a package sewage treatment plant until the City's plant is complete. The sewer line is intended to be connected at that time. The cost is borne entirely by the developer.

Contact: Administrative Assistant to the Mayor, City Hall, Green River, Wyoming 82935. (307) 875-5000

V. PAYING FOR THE IMPACTS

Money: that's where all the impacts show up. In the long-run, most *regions* will derive financial benefit from the presence of energy projects. The projects are significant property taxpayers, usually generating enough revenues to cover the costs of the impacts they cause. But there are important mismatches in time and space. While benefits are long-range and regional, impacts are often immediate and local.

The impacts arise immediately, as soon as the construction starts, if not before. The tax revenues from the energy project arrive only after a facility has been assessed and placed on the tax rolls. Spatial inequalities are equally important. The population impacts may be in the cities, while the tax revenues may go to the county. Impacts and projects – costs and revenues – may be in different counties or even different states.

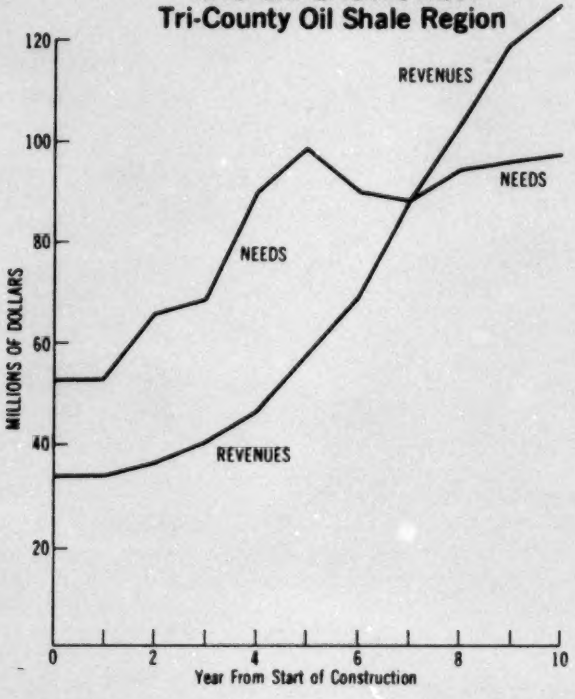
A. FISCAL IMPACTS

Several recent studies have analyzed potential fiscal impacts of energy projects. The Wyoming Select Committee on Industrial Development Impacts analyzed time required to balance costs and revenues and concluded that school districts would balance in one year after completion of the project, counties in three years, but that cities would take 25 years to balance.[17]

A similar study in North Dakota provided a series of comparable estimates for one coal gasification project.[18] It concluded that State revenues would exceed costs from the beginning, and total a $57 million benefit over 30 years. It concluded, however, that local government (city, county, school) costs would exceed revenues by $2 million during the construction period. Local revenues would exceed costs during operations, but by so little that it would take 18 years to balance out from the construction deficit. At the local level, the net benefit over 33 years of construction and operation would be $9 million – less than one-sixth the amount of State benefits for a comparable period.

A third study, the *Tax Lead Time Study* conducted in Colorado, concluded that the three counties in the oil shale region of that State would eventually show a positive financial return. It would be seven years before revenues exceeded costs, (at which time the cumulative deficit would be nearly $200 million) and over 15 years before the operating surpluses offset

Figure 7
TOTAL LOCAL REVENUES AND EXPENDITURES: Tri-County Oil Shale Region



Source Tax Lead Time Study
(Refer to Page 31)

the initial deficits. Rio Blanco would be ahead of that schedule, but Mesa County (with impacts but no oil shale projects) would never have a surplus.

If the money is available at the wrong time, there must be a way to get it earlier. And if in the wrong place, there must be a way to get it to the right place – the place with the impacts. Why is it so hard to accomplish that result? In most States the answer is traceable, at least in part, to historic issues in State and local government relationships. Many States impose limits on local tax rates, or on the revenues available to local governments, limiting their ability to respond to rapid changes in service demands. Furthermore, much of the new housing – in the form of mobile homes – does not go on the tax rolls, but is taxed as personal property or vehicles. (Note that both Colorado and Wyoming have recently changed their laws to tax mobile homes in the same manner as permanent structures.)

Unique taxation formulas often complicate the problem. Some States, for example, impose debt limitations based on a percentage of the assessed valuation. Assessment practices may delay the entry of the new energy project onto the tax rolls.

Long-term bonds for capital projects may be difficult to sell. Present residents may not approve them. Buyers may be wary because of untested credit ratings of small communities. In some instances, a case can be made for corporate or State guarantees of such bonds.

Finally, there are limits on the money available in all State and Federal programs, and there is little emphasis on communities impacted by energy development. To compound the problem of State and Federal assistance, most grants and allocation formulas consider only the present population, not the boom and post-boom populations.

The problem is particularly acute in those communities where deferred construction and maintenance must be financed simultaneously with new growth. Further, the financing for construction workers' housing and facilities has to begin before the final commitment and approval for the project. If the project were to be cancelled or delayed, it would be possible for the community to be stuck with facilities and no project, no growth and little ability to pay back the bonds.

B. GUIDELINES FOR FINANCING

In setting financial objectives and a financing plan, the following points could serve as useful guidelines for communities:

- Communities should exert a full local effort, to the best of their ability, to provide for new residents.
- The financing plan should be tied to all other aspects of the adopted plan for growth. Annual budgets and long-range capital improvement programs should be regarded as the fuel that energizes the plan.
- States can be helpful in a number of ways – passing enabling legislation that permits effective local effort; in reducing inequities among communities; in advancing critical front-end money – in grants or loans – for planning and facilities; and in providing guarantee powers for local debt, where appropriate.
- The Federal Government can assist in a number of ways, direct and indirect (See Chapter VI for specific ideas). It shares mineral leasing and offshore oil revenues; in addition, it can emphasize the impacts of energy projects in its programs.
- A sound plan for managing growth, and understanding of the workings of the "financial machinery" at all levels will increase the likelihood of communities getting State and Federal money.
- Companies will obviously contribute in the form of taxes which are now standard, but they may have to do more. Additional taxes may be necessary. There may need to be corporate guarantee of debt, prepayment of taxes and purchase of bonds or notes.
- Companies may address themselves to problems which are not the responsibility of any government program, for example, the recruitment of doctors. Voluntary aid is very helpful, but the voluntary approach alone won't do it.

The greatest financial need of communities with energy impacts – based on actual experience – is for sufficient, flexible, quick front-end money for initial planning, organizing to manage growth, engineering and land acquisition, and local shares to match State and Federal grants.

C. REVENUE SOURCES AND FISCAL DEVICES

A number of revenue sources are available to States and local governments. State legislation generally defines the sources available to local governments, and places limits on their use by cities and counties. Revenue alternatives have been outlined in the *Tax Lead Time Study* in Colorado:

- General Sales Tax
- Selective Sales Tax
- Use Tax
- Ad Valorem Property Tax
- General Occupation Tax
- Specific Occupation Tax
- User Fees

- Severance Tax
- Income Tax
- Real Estate Transfer Tax
- Site Value Tax
- Land Value Increment Tax

There are a variety of ways of getting this revenue to the right place, and at the right time. Some of these are essentially a way to translate future income into money needed in the present for construction purposes:

- General Obligation Bonds
- Revenue Bonds
- Special Assessment Bonds
- Industrial Development Bonds
- Refunding Bonds
- Leasing/Installment Purchase
- Non-Profit Corporation

Organizational vehicles for determining a broad area to which a tax can be applied are listed below. These are often ways of smoothing out inequities that would result if cities and counties were used as the taxing and distribution unit.

- Special District
- Local Improvement District
- General Improvement District
- Regional Service Authority
- Intergovernmental Agreements
- Regional Revenue Distribution
- Industry Assistance

The suggestions for industry assistance to local governments included:

- financing facilities directly (possibly leasing or loaning to community);
- purchase of bonds, or short-term notes;
- securing a bond issue;
- prepayment of taxes.

Refer to: *Tax Lead Time Study*, by Andy Briscoe, et al for Governor's Committee on Oil Shale Environmental Problems, State of Colorado. Cost – $4.00 (Paperback) $5.00 (Loose-leaf)

Obtain from: Colorado Geological Survey, Department of Natural Resources, 1845 Sherman St., Room 254, Denver, Colorado 80203.

D. IDEAS FOR FINANCIAL ACTION

The role of the States in setting overall fiscal policy and passing enabling legislation is critical. The major focus of this chapter, therefore, is on potential programs by States for the benefit of local governments.

Legislative Package: State of Wyoming

In the general session of 1975, the Wyoming State Legislature passed comprehensive financing legislation to deal with the impacts of energy development. This package was based on the well-researched *Interim Report and Recommendations of the Legislative Select Committee on Industrial Development Impact.* The research and recommendations were made with the assistance and cooperation of local governments, energy companies and financial institutions. The findings of the committee, presented below, outlined in capsule form the fiscal impacts encountered in connection with energy development:

- The effects of energy development, primarily coal related, will occur throughout the State;
- Historical and anticipated revenue patterns show that municipalities will not be capable of meeting projected demands for services and public facilities;
- The anticipated tax base from the large industrial developments will accrue primarily to the counties and to special districts (including school districts) while the public demand for services will fall primarily on the municipalities;
- Debt limitations restrict a community's ability to reasonably respond to needs.
- Major problems in capital financing include schools, housing, water and sewer facilities, highways and roads.
- The delivery of health care services, while facing an obvious need for facilities, faces a more urgent need – that of staffing new and existing facilities.

Two major objectives are met in the legislative package. First, local governing bodies are given the ability to borrow against anticipated future tax revenues to meet the "front-end" impact needs. And second, local governing bodies are given extended ability to repay the monies they borrow.

The Select Committee recommended eight items of legislation. Six substantive proposals, described in detail below, were adopted:

1. Wyoming Community Development Authority – A new State authority was created, capable of issuing up to $100 million in tax free general purpose revenue bonds. The proceeds would be used to finance housing and a wide variety of public facilities. The authority is empowered to borrow and lend money, build and lease projects, and generally play the role of a private bank.

   The Authority is set up as a "public corporation," rather than as a state department. This separates

its obligations from those of the State. The seven member board of directors is appointed by the Governor of Wyoming. The board appoints its executive director and personnel.

The Authority may provide or loan money for civic projects such as water and sewer systems, roads, storm sewers and lighting, schools, airports, hospitals, recreation facilities and public buildings. Housing may be provided through either a mortgage purchase program or a "loan to lenders" program.

The Authority is designed to be self-supporting, needing only a one-time $300,000 seed-money appropriation intended to be repaid by 1982.

Contact: Dan Sullivan, Executive Director, Wyoming Community Development Authority, Post Office Box 634, Casper, Wyoming 82602. (307) 265-0603

2. Constitutional Amendment to Raise Debt Limitations for Counties, Cities and School Districts –

This amendment to the Wyoming State Constitution will have to be approved by the voters in the 1976 general election. It would raise the debt limitations as follows:

Counties – from the present 2 per cent to 4 per cent of assessed valuation, with no limits on water projects;
Cities and towns – from the present 4 per cent to 8 per cent of assessed valuation with no limits on water and sewer projects;
School districts – from the present 10 per cent to 20 per cent of assessed valuation

Increasing the debt for public projects still requires a majority vote of the people of the local jurisdiction.

3. Joint Powers Act –

This act expands the power of counties to aid cities and towns in providing public facilities. Prior limitations prevented counties from aiding municipalities in such critical activities as sewer and water projects.

Joint powers agreements can be made to plan, finance and operate water, sewer and solid waste; recreation; police and fire; transportation; and public school facilities.

4. Increase in Sales Tax Distribution –

The State currently imposes a three per cent sales tax. Until 1975, the State returned one-sixth of that amount (one-half per cent) to cities and counties. About 15 per cent of Wyoming city revenues come from this sales tax. This legislation doubles that allocation to one-third of the sales tax (equal to one per cent), raising the average city's revenues by 15 per cent annually.

The one per cent is allocated to the county in which the sales tax license is located. Then within the county, the sales tax revenue is divided among the cities and the county according to population.

5. Use Tax Exemption –

The exemption from paying use tax on capital improvements and operating expenses of companies engaged in interstate transportation was ended. One-third of the increased revenue will be given to cities and counties.

6. Coal Tax for Impact Assistance –

The Select Committee determined that $65 million was needed over the next five years to meet increased highway, road, water and sewer needs in various parts of the State. It also concluded that the coal industry should properly assume the burden of paying for needed improvements. The State has now passed a severance tax which increases from 0.5 to 2 per cent of value by 1978. The tax will be in effect until the total tax collected reaches $120 million.

At least 60 per cent of the revenues derived from the tax have to be spent by local governments or by the State Highway Department on highways and roads in impacted areas. The remaining funds may be used for municipal water and sewer financing. This money can be used to match Federal grants, and can be pledged to support borrowed funds. The Wyoming Community Development Authority can be the source of those borrowed funds. The coal tax revenue fund is administered by the Wyoming Farm Loan Board.

For further reference: *Interim Report and Recommendations, Legislative Select Committee on Industrial Development Impact*, Wyoming State Legislature, December 1974.

Contacts: *Chairman of Committee*—Senator John Ostlund, Capitol Building, Cheyenne, Wyoming 82001. (307) 777-7702

Consultant—Robert L. Pettigrew, Mayor – City Hall, Casper, Wyoming 82601. (307) 235-2157

Regional Revenue Sharing: Twin Cities, Minnesota

One of the major problems of fiscal impact is that the energy project may be in one jurisdiction while the impact is felt in another. To overcome similar

problems, the Minnesota Legislature created a procedure for distributing a portion of the new tax base of industrial and commercial development among all local governments in the Twin Cities (Minneapolis/St. Paul) Metropolitan Area.

Forty per cent of the net growth in commercial/industrial value will be "pooled" for bookkeeping purposes, and each community will receive a share of that pool. Each community's share is assigned in proportion to its population, and is adjusted inversely to its assessed valuation, so that it receives a larger proportion if its per capita property valuation is below the metropolitan average, and a smaller proportion if above.

With this regional system, no additional tax is imposed on companies. No new taxing agency is created so that taxing units retain their autonomy and continue to set their own tax rates.

Refer to: "Fiscal Disparities Bill," (An Act Relating to Metropolitan Development), Chapter 24, 1971, Extra Session. Charge – $2.05

Obtain from: Documents Section, 140 Centennial Building, St. Paul, Minnesota 55155

Optional Sales Tax: State of Wyoming

Impacts are most severe in the cities. Cities are also the site of most retail sales. A tax on retail sales could be a big source of revenues for cities. Many States have a State-wide sales tax, with a portion of the receipts returned to cities. Wyoming, for example, has a three per cent tax, with one cent returned to cities and counties. In addition, the State allows cities and counties, by a vote of the people to impose an optional one cent sales tax, which goes directly to the place of sale.

The impact of this additional tax, which makes the total tax four per cent, can be substantial. In Green River, the optional tax will bring in $550,000 this year, almost 45 per cent of the total operating budget.

In Rock Springs, over $2 million will be collected, out of a total budget of $5.6 million. The optional sales tax for Wyoming must be passed county-wide. Voter approval is for two years only, and it must be voted on again to continue another two years.

Sharing of Energy Project Property Taxes: Wisconsin

If the impacts (costs) and benefits (revenues) of energy projects are in different jurisdictions, how do we get the needed sharing of revenues? The body with the tax income is unlikely to voluntarily give it to the body in need. The State of Wisconsin in 1971 adopted a plan for State-wide sharing of all property tax revenues from energy plants.

A tax rate, equal to the State-wide average of all State, county and local taxes, is applied to the full market value of the utilities' taxable property. This payment is in lieu of all other taxes except special assessments. The money is distributed to the State and local governments under a complicated formula. The results State-wide for 1973 were as follows:

Recipients	*Per Cent*	*Amount (Millions)*
State of Wisconsin	6.7%	$ 2.7
Local Jurisdictions in Which Plant is Located		
Counties	18.5	7.5
Municipalities	16.9	6.9
School Districts	9.6	3.9
All Local Governments		
Counties	7.8	3.2
Municipalities	40.5	16.5

Refer to: Chapter 76, Wisconsin Statutes, 1971

Contact: Secretary, Department of Local Affairs & Development, 123 West Washington Avenue, Madison, Wisconsin 53702. (608) 266-1018

State Grants from Energy Income:

Several Western States have established policies for the use of income from the two major revenue services for energy development:

- Each State gets 37½ per cent of the money paid within its boundaries for leasing Federal land for mining purposes, e.g., coal and oil shale. Under the Mineral Leasing Act, this money must be spent for schools and roads. Colorado has received $24 million this year for oil shale which is being held in escrow pending actual impacts. The money will be spent in impacted areas.
- Severance taxes on the mining of coal have been adopted by most if not all States with coal acreage, for example:

Montana: 20 percent on lignite, 30 per cent on other coal; 17½ per cent goes to impacted communities; 10 per cent to education; 4 per cent to county;
North Dakota: 50¢ per ton coal tax; 35 per cent goes to impacted areas for capital and operating costs;
Wyoming: Up to 2 per cent tax goes to roads, water and sewer systems in impacted communities (see page 32).

Prepayment of Sales Taxes: State of Utah

One of the suggested ways of beating the "front-end" money problem is to let energy companies pay

their taxes in advance. In its 1975 General Session, the Utah State Legislature passed a Resource Development Act (S.B. No. 256) to allow just that.

Any natural resource development company may prepay the State (but not local) sales tax which it might expect to pay during construction or operation. The money collected is spent by the State on State-related public improvements in the areas of impact.

The State Road Commission may spend its money on State highways in the area of the energy project, or make special grants to the county of the project for county roads. The State Board of Education must give its money to school districts in which the energy projects are located.

The company operating the coal mine for the Kaiparowits electric generating plant in Kane County is about to make a $48 million prepayment of its State sales tax. It should be noted that serious concerns have been expressed by energy companies and legal experts about the problems created in company financing and Federal taxes with any prepayment of State or local taxes.

Contact: Secretary of State, 203 State Capitol Building, Salt Lake City, Utah 84114. (801) 533-5151

Water Systems from Liquor Taxes: State of Utah

One of the big needs for community capital spending is for water systems. While often the systems will pay for themselves in the long-run, very small communities have trouble getting the construction money. Debt limitations are very low compared to the total need, and bond buyers don't give high credit ratings.

The State of Utah has appropriated $2 million from liquor control profits to be used for grants to municipalities and improvement districts for water systems. The program is run by the State Board of Water Resources, which may grant money for new systems or upgrading existing ones. The grant may be for all or part of the total cost.

This program provides money to communities by buying their bonds. As the money is repaid, the program will become a revolving fund. The first among eleven criteria used in setting priorities is:

> "Probable growth of population due to actual or prospective economic development in an area."

One of the first big projects is the provision of $500,000 (out of a total of $3.1 million) for the Price River Water Improvement District in Carbon County. Five cities in Emory County, impacted by coal mining, are getting a total of $678,000 in aid this year.

Refer to: S.B. No. 110, 1975 General Session "Grants for Municipal and Improvement District Water Systems."

Contact: Director, State Department of Water Resources, 435 State Capitol Building, Salt Lake City, Utah 84114. (801) 533-5401

VI. SOURCES OF ASSISTANCE

Help may consist of a word of advice, a useful report, or money. This chapter presents four major types of aid:

- Technical assistance
- Funds for planning and management
- Funds for capital projects
- Funds for operating purposes

When it comes to funds, only those given by Federal programs are listed. A book listing every possible program for all of the 50 States would be massive. Instead, there is listed for each State the State agency of local affairs which can direct you to programs in addition to those listed here and in previous chapters.

The Federal programs listed in this chapter have been partially screened, with emphasis on those which have actually been used by impacted communities and States. Those which come automatically, such as General Revenue Sharing, are not listed. These programs are those which will take some initiative on your part.

NOTE: The names, addresses and phone numbers indicated are as of the date of publication and may change in some cases by the time you use this book.

A. TECHNICAL ASSISTANCE

The people and agencies listed here don't offer money – but money is not the first thing you need. To start out well, you need good information to figure out what impacts are expected and what the appropriate responses are.

Sources of technical assistance include public and private agencies and groups, at the national, regional and state levels – sources that could be useful to you. The list is not inclusive for there are too many people active to get them all. Those listed should be able to direct you to the ones who can best help you.

HUD

The first part of HUD's technical assistance is the preparation and distribution of this report. It has been designed to allow you to go directly to the source for answers to your questions, so try that first. Reports and references listed later (page 38) are available from the sources listed, not from HUD.

Where HUD can help you is in identifying the right office and person for technical or financial aid. The Community Planning and Development staff in your HUD regional office can also direct you to the appropriate office within HUD to discuss:

- Comprehensive Planning Assistance (701)
- Housing Programs
- Community Development Block Grants
- New Communities Assistance

Contacts: Assistant Regional Administrator for Community Planning and Development, Regional Office, HUD, listed on Inside Back Cover (Table 5).

Federal Energy Administration

The Office of Energy Resource Development has prepared and collected extensive studies on the impacts associated with the building of new energy projects. This office also has information on energy needs, on plant siting and approval processes, and on the experience of other communities. Contact regional energy resource development coordinators or regional administrators for above data (See Table 3). Concerns or inquiries relating to a major problem or national issue (which cannot be responded to at the regional level) should be directed to:

Contact: Assistant Administrator, Energy Resource Development, FEA, 12th St. and Pennsylvania Avenue, N.W., Washington, D.C. 20461. (202) 961-8471

Coastal Zone Management

The Office of Coastal Zone Management in the Department of Commerce has given a lot of attention to the impacts of energy projects in coastal zones. These zones will be the locations of onshore support facilities for offshore oil and gas exploration and production. In addition, many nuclear power plants will be located in coastal zones because of their need for coolant water.

Most of the CZM effort goes through the State planning programs (see following). The Office has put together a concise report on the likely impacts, which may be especially useful to coastal communities. It is available from the Washington office of CZM.

Refer to: *Coastal Management Aspects of OCS* 73 pages. Free.

Contact: Technical Coordinator, Office of Coastal Zone Management, NOAA, 3300 Whitehaven St., N.W., Washington, D.C. 20235. (202) 634-4241

State Coastal Zone Management Offices

In each of the 30 States which are developing coastal zone programs with Federal assistance, a State agency

has been named to oversee this program. They are working directly with the local governments in the coastal zones, and can provide information on how planning for energy projects fits into their planning.

The State office responsible for coastal zone planning in each State is listed in Table 2 on page 46.

Federal Regional Councils

FRC's were created to permit closer working relationships between the major Federal domestic agencies and State and local governments. There is a council for each of the ten standard Federal regions with eleven agencies represented:

Department of Housing and Urban Development
Department of Agriculture
Department of Commerce
Department of Health, Education and Welfare
Department of the Interior
Department of Labor
Department of Transportation
Community Services Administration
Environmental Protection Agency
Federal Energy Administration
Law Enforcement Assistance Administration

The Federal Regional Council can help in two ways:

1) Directing States and communities to the appropriate Federal agency or program;
2) Coordinating the efforts of two or more Federal agencies in studying or responding to the problems of impacts in specific communities

Contact: The HUD Assistant Regional Administrator for Community Planning and Development, listed on Inside Back Cover, can put you in touch with the chairman, executive director or members of your Federal Regional Council.

The Denver FRC (Region VIII) has appointed a special committee which has studied the problems facing communities within its six State area. Results of their complete survey were presented earlier, on pages 13 and 19.

Refer to: Socioeconomic Impacts of Natural Resource Development Committee

Contact: Russell Fitch (Chairman) Federal Energy Administration, 1075 S. Yukon St., P. O. Box 26247, Belmar Branch, Lakewood, Colorado 80226 (303) 234-2420

Regional Commissions

The eight regional commissions are formal partnerships of the Federal Government and a group of States to promote sound economic development. Energy projects are providing development in these regions, and the commissions are working to respond to the opportunities and problems created.

The commissions include the Appalachian Regional Commission and seven others coordinated through the Department of Commerce: Coastal Plains, Four Corners, New England, Old West, Ozarks, Pacific Northwest and Upper Great Lakes. The States wholly or partially within each regional commission are listed in Table 2 and 4.

The regional commissions can offer information on other communities within the region, and direct you to specific sources of financial aid. Each commission can also provide financial assistance – these programs are described on pages 41 and 44.

Contact: Governor's Alternate for your State,
OR
Main office or office of Federal Co-Chairman, listed in Table 4 on page 48.

Rural Development Service

RDS is responsible for coordinating a nationwide rural development program using all the resources of Federal and State agencies. All towns of 10,000 population or less are defined as rural, and towns of up to 50,000 population are eligible for some forms of assistance.

The RDS has put together a computer-based information system which covers all the potential programs in the *Catalog of Federal Domestic Assistance.* Communities can submit their needs and find out the programs they are eligible for, considering their size, geographic location and availability of funds.

Contact: State and Local Coordinator, Rural Development Service, Department of Agriculture, South Building, Room 4110, 14th St. and Independence Ave., S.W., Washington, D.C. 20250. (202) 447-5941

Department of the Interior

Interior is heavily involved in the production of energy. Offshore oil and gas from the Outer Continental Shelf (OCS) is under the control of the Bureau of Land Management (BLM).

Contact: Director, Office of OCS Program Coordination, Department of the Interior, Room 4150, C Street between 18th and 19th Streets, N.W., Washington, D.C. 20240. (202) 343-5978.

Much Western coal is on land controlled by BLM. Most of the oil shale program is on land leased from BLM. Some coal is on Indian land, served by the Bureau of Indian Affairs. Other Interior components include the Bureau of Reclamation, Bureau of Mines, Geological Survey and several power administrations. The responsible DOI bureau for energy programs can vary by area.

Contact: Special Assistant to the Secretary of the Interior, Regional Offices, listed in Table 3 on page 47.

State Departments of Local Affairs

One of the most useful sources of information about the aid that's available for communities in your state is the State department of local affairs. At least 42 states have such an agency to coordinate state services to local governments and to run various programs on their behalf. Generally services provided include:

- Technical assistance and advisory services
- Assistance on State and Federal aid
- Planning services
- Community and resource development

These agencies are supported in part by HUD 701 Comprehensive Planning grants. To assist you in finding this aid, the agency for local affairs for each State is listed in Table 2 on page 46. Offices are located in the State capital.

National Governors' Conference

NGC has established an Energy Project which is giving some attention to the impacts of energy projects. The main focus is on nuclear power plants, as this is a nationwide concern. Conferences on siting problems and impacts have been held with NGC and the Nuclear Regulatory Commission. Results of these should be available soon.

Contact: Energy Project, National Governors' Conference, 1150 - 17th Street, N.W., Washington, D.C. 20036. (202) 785-8840

Federation of Rocky Mountain States

FRMS is directed by the Governors of Colorado, Montana, New Mexico, Utah and Wyoming, and includes members from public and private organizations in those five states. The purpose is to consider and propose solutions to common problems. One of the current pressing problems is the impact of energy development.

Conferences have been held and reports written in the areas of land use controls, housing, finances and energy project problems. Much of this material has been included in their recent book, *Energy Development in the Rocky Mountain Region: Goals and Concerns.*

Contact: Michael H. Annison, Exec. Vice President, Federation of Rocky Mountain States, 2480 West 26th Street, Suite 300-B, Denver, Colorado 80211. (303) 458-8000.

Western Governors' Regional Energy Policy Office

To focus the attention of the Governors of ten States directly affected be energy development, the Western Governors' Energy Policy Office was formed early in 1975. The States involved are Arizona, Colorado, Montana, Nebraska, Nevada, New Mexico, North Dakota, South Dakota, Utah and Wyoming. The first major project of the Office was the National Conference on Financial Requirements for Energy Development in the Western States Region (including housing and community services). In addition, the WGREPO will be defining a common position for the States in their dealings with the Federal Government on the scale and pace of energy development.

Contact: William Guy, Executive Director, Western Governors' Regional Energy Policy Office, 4730 Oakland Street, Denver, Colorado 80239. (303) 371-4280.

National Association of Counties

NACo is one of the first public interest groups to look at the specific problems of the impact of energy projects on its members. Under contract from the Office of Intergovernmental Relations of the Federal Energy Administration, NACo has done a case study on the planning process involved with a proposed project. This first case deals with the Kaiparowits Project in Kane County, Utah. (see page 16). Additional case studies are expected for counties which have gone through the impacts of an energy project.

Contact: Energy Project, National Association of Counties, 1735 New York Avenue, N.W., Washington, D.C. 20006. (202) 785-9577

American Society of Planning Officials (ASPO)

ASPO has put together a comprehensive bibliography on energy and its relation to planning. Included are studies and reports done on the impacts of energy projects. Available to ASPO members.

Refer to: *Energy Efficient Planning: An Annotated Bibliography*

Contact: American Society of Planning Officials, 1313 East 60th Street, Chicago, Illinois 60637. (312) 947-2074

Denver Research Institute

Concentrating on the Western/Rocky Mountain area, the Denver Research Institute has done extensive work in assessing and projecting the impacts of energy resource development on communities and regions. DRI is the research arm of the University of Denver, a non-profit organization working for both public and private agencies. Studies have been done of Sweetwater County and Campbell County, Wyoming; oil shale region of Colorado; coal gasification in North Dakota; plus case studies in Utah and Montana.

Contact: Jack Gilmore, Senior Research Economist, Denver Research Institute, University of Denver, University Park, Denver, Colorado 80210. (303) 753-3207

REFERENCES

Many volumes have been written on energy problems and many more on energy impacts, but only a few are of real value to communities facing these impacts. These books and reports are useful to States and local communities:

Boom Town Growth Management, by Jack Gilmore and Mary Duff (of Denver Research Institute). Covers impact assessment and recommendations for Sweetwater County, Wyoming. 200 pp, plus appendices. Price – $15.00

Obtain from: Westview Press, Inc., Flatiron Industrial Park, Boulder, Colorado 80301.

Coastal Management Aspects of OCS, by Office of Coastal Zone Management. Discusses offshore and onshore activities, socio-economic and environmental impacts, and planning and management. 73 pages, free.

Obtain from: Technical Coordinator, Office of Coastal Zone Management, NOAA, 3300 Whitehaven St., N.W., Washington, D.C. 20235.

NACo Case Study No. 1: Kaiparowits New Town Project, Kane County, Utah, by National Association of Counties under contract to FEA, June 1975. Free.

Obtain from: Energy Project, National Association of Counties, 1735 New York Avenue, N.W., Washington, D.C. 20006.

Onshore Planning for Offshore Oil, by Pamela L. Baldwin and Malcolm F. Baldwin. (Washington, D.C.: The Conservation Foundation, January 1975). Looks in detail at the impacts of offshore oil in the North Sea on Scotland, and applies lessons to the potential U.S. impacts of Atlantic OCS development. Hardcover – $10.00, softcover – $5.00.

Obtain from: Your local bookstore.

Energy Development in the Rocky Mountain Region: Goals and Concerns, by Federation of Rocky Mountain States, July 1975. Includes proposed regional energy policy statement; and 15 articles on economic and social impacts, legal aspects, and roles of Federal, state and local agencies. 134 pages, $2.50.

Obtain from: Federation of Rocky Mountain States, 2480 West 26th Street, Suite 300-B, Denver, Colorado 80211.

Report of National Conference: The States' Role in Strengthening Local Government Capabilities, prepared by Department of Community Affairs, State of Pennsylvania, May 1975. Report on conference of agencies of local affairs held in Harrisburg in September 1974 funded by HUD 701 Comprehensive Planning Program. Relates experiences of agencies and sets out "cookbook" of ideas. 187 pages, free.

Obtain from: Assistant Regional Administrator for Community Planning and Development, Regional Office, HUD, listed on Inside Back Cover.

Two more advanced documents with detailed information on potential impacts and programs to deal with them are:

Evaluation of Power Facilities: A Reviewer's Handbook, prepared by Berkshire County (Mass.) Regional Planning Commission. Covers all impacts to be considered by local community, including environmental, physical, social, economic and fiscal in several hundred pages. Sponsored by research grant from the Office of Policy Development and Research of HUD. Published in April 1974. 378 pages. Order Number: PB-239 221 – $10.25

Obtain from: NTIS (National Technical Information Service), Springfield, Virginia 22151.

Management & Control of Growth, by Urban Land Institute. The issues, techniques, problems and trends of growth management in a three-volume reference work, with articles by 140 authors. Separate chapters on land use techniques, and State housing and land use policies. Assisted by a grant from the Office of Policy Development and Research of HUD. 1975. $22.50 for set.

Obtain from: Urban Land Institute, 1200 - 18th Street, N.W., Washington, D.C. 20036.

B. FEDERAL FINANCIAL ASSISTANCE FOR PLANNING AND MANAGEMENT

These are programs which provide funds to states, areawide districts, cities and counties to study potential impacts, draw up growth policies and plans, prepare land use and housing plans, plan for the provision of specific services and figure out how to pay for them. No monies are provided under these programs to either build or operate public facilities. That comes later.

NOTE: The numbers in parentheses, for example (14.203), for the HUD 701 Comprehensive Planning Program indicates the program number in the *Catalog of Federal Domestic Assistance*, by the Office of Management and Budget.

Obtain the 1975 version from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. $17.00 for looseleaf text and changes during the year.

HUD 701 Comprehensive Planning Program (14.203)

HUD provides funds to States, area wide planning organizations, and local governments to support comprehensive planning and for specific plans for growth, land use and housing. The purposes are general enough that this money can easily be used for studying and responding to a broad range of project impacts. Here are a few points to keep in mind:

- Most of the money for smaller communities, such as those we focus on in this publication, will be allocated by the States, not by HUD;
- The emphasis is very much on regional planning at the sub-State level;
- The HUD 701 Act requires that all agencies receiving funds have land use and housing elements developed by 1977;
- These elements must be coordinated with the areawide planning being supported by the 208 wastewater planning program of the Environmental Protection Agency, and the Coastal Zone Management program of Department of Commerce.

701 funds are allocated under five categories (with FY '75 amount)

1) Statewide planning
2) Large cities (over 50,000 pop.) and urban counties
3) Metro areawide planning organizations
4) Non-metropolitan areawide districts
5) Local assistance, to counties and towns under 50,000 population

The funds under categories 4 and 5, of most concern to rural impacted communities, are allocated by HUD to the *States*, which then make the decisions on who gets how much. Each State has a designated agency (listed in Table 2) making that allocation, based on published criteria. Factors considered include past performance, capability, coordination and implementation.

The amount of money available to a community or areawide district is not sufficient under this process to do all the needed planning. The 701 funds, therefore, should be used to package or support a coordinated planning effort using other funds available from State counterpart agencies of EDA, EPA and CZM, and from regional commissions.

Recent HUD 701 grants for local assistance, all given through the State, include: $69,000 to Big Horn County, Montana; $92,000 to Butte County, South Dakota; $61,000 to Carbon, County, Utah; and $27,000 to Campbell County, Wyoming. Non-metro grants have included a total of $199,000 to the Lewis & Clark 1805 Planning District in North Dakota; and $96,000 to the Tri-County Council for Southern Maryland, which includes Calvert County.

Contacts: State office administering HUD 701 Grants, – see Table 2, page 46,
OR
Assistant Regional Administrator for Community Planning and Development, Regional Office, HUD, listed on Inside Back Cover.

FEA Reimbursement Program

The Federal Energy Administration has had a program of cooperative agreements with States to carry out a variety of energy planning studies and programs. Implemented in FY '75, the program has been requested for continuation in the FY '76 Budget. These funds can be used for fuel allocation programs, Statewide energy plans and studies of the impacts of energy policies and resource development. Money can be re-allocated by States to their local governments for the same purposes. Alabama has used some of its funds in studying the proposed Ameraport (see page 12), Arizona used funds to assess the impacts of energy development, and Virginia used funds for looking at the impacts of offshore oil.

Contact: Regional Administrator, FEA, listed in Table 3, page 47.

Coastal Zone Management (11.418)

The Coastal Zone Management Act of 1972 authorized the Commerce Department to give grants to the 34 eligible coastal states to plan for a coastal zone management program. The grants are given annually, with a three-year limit. It is assumed the planning will be complete by 1977. Each plan must take energy projects into account. And planning must be done in cooperation with local governments within the defined "coastal zone." A special appropriation of $3 million each year in FY '75 and FY '76 goes to States to study the impacts of potential OCS development. A guidance paper is available to the States from CZM.

HUD has recently signed an interagency agreement with CZM to insure consistency in land use planning and particularly in regulation. Planning done in the coastal zone under CZM can also meet the HUD 701 Comprehensive Planning requirements for land use and housing elements.

Contact: State agency for Coastal Zone Management, listed in Table 2 on page 46,
OR
Regional Coordinator, Office of Coastal Zone Management, NOAA, 3300 Whitehaven St., N.W., Washington, D.C. 20007. (202) 634-4232

EPA "208" Planning for Wastewater Systems (66.426)

Section 208 of the Federal Water Pollution Control Act Amendments of 1972 created a major planning program for areawide waste water treatment management planning. By the end of FY '75, the Environmental Protection Agency had designated 149 regional agencies and areas, largely in metropolitan areas, as the "208" planning agencies. In most cases, the State Governor designates the agency, usually an existing planning agency such as a council of governments, sub-State district or other areawide district. The State is responsible for conducting planning in areas not designated.

The funding is committed at the beginning for the entire two-year planning process. Most plans are now due between January and November, 1977. The HUD 701 land use and housing elements are also due in 1977, so HUD and EPA reached an interagency agreement to coordinate the land use aspects of the HUD 701 and EPA 208 programs.

States and local communities can work with the 208 agency to assure that their plans consider the impacts of energy projects. Much of the basic inventory work, such as aerial photos done by 208, can be used in local planning.

Regions with impacted communities have received EPA 208 planning grants. The Colorado West Council of Governments has $363,000 for the area impacted by oil shale development. The Five County Association of Governments in Southwest Utah has $380,000, while $375,000 went to Butte County, South Dakota. The Powder River Area of Wyoming, including Campbell County, has a grant of $415,000.

Contact: Areawide planning agency,
OR
208 Contacts – Regional Office, EPA listed in Table 3 on page 47.

Regional Commissions

The eight regional commissions each have the authority to grant funds to their states, areawide districts or local governments for planning purposes. This can include money for technical assistance, research studies, planning and demonstration projects.

The Appalachian Regional Commission has three programs which may be useful:

- State Housing Technical Assistance – to states only, averages about $85,000 annually (23.006)
- Local Development District Assistance (23.009) – basic support for 69 LDD's, averages $51,000
- State Research, Technical Assistance and Demonstration Projects (23.011) – discretionary grants to states for projects of regional significance; about 90 projects this year averaging $20,000

Contact: Appalachian State Representative, Office of the Governor.

The technical assistance and planning grants for the other regional commissions are discretionary, not by formula. Eligible applicants include member states, areawide districts, local governments and non-profit organizations. The list below indicates the Catalog Number, the range of grants in the last year, and the average grant awarded:

Regional Commission	*Catalog Number*	*Range ($000)*	*Average ($000)*
Coastal Plains	28.002	8-250	45
Four Corners	38.002	2-110	32
New England	48.002	10-400	185
Old West	75.002	By the Commission	
Ozarks	52.002	2-175	30
Pacific Northwest	76.002	NA	39
Upper Great Lakes	63.002	2-200	47

Contact: Governor's Alternate or Representative,
OR
Regional Commission Office, listed in Table 4 on page 48.

Economic Development Administration (11.303)

EDA has a program of technical assistance to provide information and demonstrate possible responses. They might fund feasibility studies, seminars, demonstration projects or training. The grants are very flexible, but because of this are in heavy demand. 140 projects are programmed for 1975-76, averaging $40,000 to $92,000.

Contact: Chief, Technical Assistance, Regional Office, EDA, listed in Table 3 on page 47,
OR
Chief, Program Development, Productivity and Human Resources, Commerce Building, 14th and E Streets, N.W., Washington, D.C. 20230. (202) 962-4101

EDA Support to Economic Development Districts (11.302)

EDD's are multi-county districts designed to unite economically lagging areas with those of growth potential. The 157 districts in 40 States are run by local officials. The EDD's may also be the areawide planning district or A-95 agency. In Fiscal 1974, EDA approved $6.2 million to help 143 districts meet operating costs – salaries and expenses. The EDA contribution cannot exceed 75 per cent of total costs. An Overall Economic Development Program must be prepared and kept up to date.

In addition, EDA has a new program called District Operational Assistance (11.306), which allows the Economic Development Districts to provide technical assistance to the local governments within them.

Grants are used to provide professional assistance, and to defray costs of Federal review procedures. The range of grants is expected to be from $3,000 to $30,000. They cannot be for more than 75 per cent of eligible costs.

Contact: Economic Development District,
OR
Chief, Planning Division, Regional Office, EDA, listed in Table 3 on page 47.

Health Maintenance Organizations (13.256)

HEW has established an office to promote the establishment of health maintenance organizations (HMO). Eligible applicants include public and private non-profit organizations that plan to develop and operate an HMO. Profit making groups can be aided if they are in a medically underserved area. HEW can give project grants, research contracts, direct loans and guaranteed loans.

In FY '75, 165 grants were funded, ranging from $50,000 to $1 million. The average was about $100,000. Ten per cent matching is required. Grants are for a one year period. Awards are made by the HEW regional office.

Contact: Regional Health Administrator, HEW, listed in Table 3 on page 47.

Intergovernmental Personnel Act – Mobility (27.011)

The Civil Service Commission runs the IPA programs, which include the temporary assignment of personnel exchanged between Federal agencies, states and local governments. It may be possible for a state or impacted community to obtain the services of a qualified Federal employee in planning and managing rapid growth. HUD may be one source of people. Assignments are generally for two years. Salary arrangements are worked out between the State or local government and the Federal agency, with potentials ranging from full Federal to full state/local support. About 1,000 assignments were made in Fiscal Year 1975 for the entire country.

Contact: Regional office of the Federal agency in which you are interested.

For further information, contact:
Chief, Intergovernmental Personnel Programs Division, Regional Office, Civil Service Commission.

C. FEDERAL FUNDS FOR CAPITAL PROJECTS

There are no new special programs for communities impacted by energy projects. You will have to compete with other state and local governments within existing programs at existing levels of funding. Existing programs, especially those which have been available to impacted communities, include the following:

HUD Community Development Block Grants (14.218 & .219)

Several existing categorical programs for community development have been consolidated into a new single block grant program. The primary objective of the program is the development of viable urban communities by providing decent housing, a suitable living environment and expanding economic opportunities, principally for persons of low-and moderate income. This is to be achieved through elimination of slums, blight and detrimental living conditions, conservation and expansion of housing and housing opportunities, increased public services, improved use of land, increased neighborhood diversity, and preservation of property with special values. The program also seeks of national growth policy by establishing a system which (1) provides annual assistance with maximum certainty and minimum delay, (2) encourages community development activities consistent with local and areawide planning, (3) further achievement of the national housing goal, and (4) provides for coordinated and mutually supportive housing and community development activities.

Rural cities and counties must apply directly to the HUD Area Office (Office of Community Planning and Development). Applicants must prepare a three-year CD program, identifying needs, proposing a program and specifying objectives. In the first year of operation, the City of Vernal, Utah (pop. 5,000) received $105,000 for water and sewer facilities and land acquisition. Buffalo, Wyoming (pop. 4,500) received $127,000 to provide water and sewer facilities, streets and housing rehabilitation.

Apply to: Area offices of Community Planning and Development, HUD (Located in cities listed in last column on Inside Back Cover).

Contact: National Model Cities Community Development Directors Association, Washington, D.C., CD HOT LINE: (800) 424-9244 (9-4:30 EST)

EDA Grants and Loans for Public Works and Development Facilities (11.300)

This program is designed to assist in the construction of public facilities – such as water and sewer systems, transportation facilities and site improvements for industrial parks. Eligible applicants include States, local governments, Indian Tribes and non-profit organizations. The basic grant rate is 50 per cent, with more possible for Indian Tribes, severely depressed areas, and redevelopment areas located in EDD's (Economic Development Districts). Long-term loans are also available.

The range of projects in 1974 was from $125,000 to $2.5 million, averaging $380,000. At Shawneetown, Illinois, a $2.6 million grant will be used to help develop a public facility to handle low-sulpher coal. This port and storage facility will encourage new mining activity.

Contact: Chief, Public Works, Regional Office, EDA, listed in Table 3 on page 47.

EDA Title IX – Special Adjustment (11.307)

Title IX is designed to meet the needs of communities faced with an actual or threatened economic dislocation or other adjustment problem. The legislative history for this program contains a discussion of the Trident Missile Base development in Kitsap County, Washington (page 17) as an example of an "other adjustment problem." Eligible recipients include individual states and cities, counties, economic development districts and Indian tribes singly or in combination. Grants may be made for public facilities, business development, planning, research, technical assistance, public services, rent supplements, mortgage payment assistance, relocation of individuals, training, unemployment compensation (if the eligible recipient is a State) and any other appropriate assistance.

Within the past year, funds have been given to a number of energy impacted communities, including:

- Beulah, North Dakota, $485,000 for water system
- Craig, Colorado, $250,000 for water system and $175,000 for storm drains
- Price, Utah, $50,000 for a study of their water system needs

It is an EDA Title IX grant which is supporting the technical assistance program for Gillette, Wyoming (see page 55).

Contact: Title IX Coordinator, Regional Office, EDA, listed in Table 3, on page 47.

EPA Wastewater Treatment Construction Grants (66.418)

The major source of funds for the construction of wastewater treatment plants and systems is the Environmental Protection Agency. Such systems may serve municipal and industrial wastes, covering individual communities or regions. The emphasis is on regional systems based on the planning done under the EPA 208 program (see page 40). Funds are allocated by the States.

The Federal grant is for 75 per cent of the eligible project costs. Grants in 1974 ranged from $2,000 to $236 million, with the average about $1.6 million.

Some States assist grantees in providing the 25 per cent non-Federal share. Green River, Wyoming is about to begin construction on a new treatment plant using an EPA grant. Dickenson, North Dakota received a grant of $675,000, while $427,000 went to Huntington, Utah.

Contact: State Water Pollution Control Administrator,
OR
EPA Regional Office, listed in Table 3 on page 47.

Farmers Home Administration

For rural areas, the FHA can be a big source of aid under two programs:

Water and Waste Disposal Systems for Rural Communities (10.418) Grants ranging up to $1.0 million, averaging $200,000; loans up to $20 million, averaging $360,000.

Community Facilities Loans (10.423), for fire, transportation, traffic control, community, social, cultural, health and recreation. Up to $5.7 million, averaging $493,000.

Eligible applicants include cities, counties, areawide districts, non-profit organizations, and Indian tribes. The systems or facilities must serve open country or communities of less than 10,000 population.

Examples of recent funding in impacted communities include: Dunn Center, North Dakota – $81,000 loan and $60,000 grant for water system; Steamboat Springs, Colorado – $900,000 loan for hospital; Huntington, Utah – $873,000 loan for sewage system (also received $427,000 grant from EPA); and Douglas, Wyoming – $34,000 loan for child care facility.

Contact: County FmHA Office (check phone book),
OR (if no county office)
State FmHA Director, located in State capital.

FmHA Business Loans (10.422)

While directed to private organizations, this loan program of the Farmers Home Administration is also available to public bodies and Indian tribes. Loans are given for business, industry and residential purposes. Fiscal '75 had about 780 loans ranging from $11,000 to $31 million, averaging $450,000.

Examples of recent loans in impacted communities include: $540,000 for a trailer court in Gillette, Wyoming; $145,000 for a medical and dental clinic in Rifle, Colorado; $420,000 for a 24-unit housing project in Forsyth, Montana; and $655,000 for an elderly rental housing project in Spearfish, South Dakota.

Contact: County FmHA Office (check phone book),
OR (if no county office)
State FmHA Director, located in State capital.

FAA Aid to Airports (20.102)

The Federal Aviation Administration, Department of Transportation, makes grants to states, counties, cities and other public bodies for airport construction and expansion. Grants can be made for land acquisition, runways and aprons, lighting and safety equipment, but not for terminals or hangers. FAA offices will have to be contacted for specific eligibility of your airport, and share of Federal assistance.

Contact: Regional FAA Office,
OR
Airports, AAS-400, Airports Service, 800 Independence Avenue, S.W., Washington, D.C. 20590. (202) 426-3451

Outdoor Recreation (15.400)

The Land and Water Conservation Fund provides matching grants to States and local units of government for acquisition and development of public outdoor recreation areas and facilities. Each State receives an annual apportionment based on the formula provided in the Land and Water Conservation Fund Act of 1965 (as amended). Funds are granted to the States on a project-by-project basis. Funds may be transferred to political subdivisions of the State for approved projects.

Not more than 50 percent of total eligible costs may come from Federal funds. Approximately $220 million is available for obligation for Fiscal Year 1976. Grants range up to $5.4 million, averaging $68,000. Competition for grants for locally sponsored projects is very heavy in most States.

Contact: State Park/Recreation Agency,
OR
State Department of Local Affairs, listed in Table 2 on page 46.

Regional Commission Supplements to Federal Grants-in-Aid

The Appalachian Regional Commission has a program of supplemental grants-in-aid and several programs for direct grants:

Program	*Catalog Number*	*Range ($000)*	*Average ($000)*
Supplemental Grants	23.002	12-15,000	201
Development Highway	23.003	Total of	147M
Local Access Roads	23.008	49-789	375
Housing Site Devel.	23.014	2-215	127

The seven regional commissions coordinated through the Department of Commerce do not have programs to provide the major part of capital facility costs. Five of them, however, have funds for supplementing capital grants given by other Federal agencies. Eligible recipients include States, local governments and nonprofit organizations. Eligible costs are for construction and equipping of facilities, and for land acquisition.

The total Federal share, combining the basic grant and the regional commission supplement, cannot exceed 80 per cent. The State or local government must pay at least 20 per cent of total costs.

Regional Commission	*Catalog Number*	*Range ($000)*	*Average ($000)*
Coastal Plains	28.003	8-500	127
Four Corners	38.003	3-340	52
New England	48.003	NA	NA
Ozarks	52.003	5-528	98
Upper Great Lakes	63.003	2-250	76

The Old West and Pacific Northwest Regional Commissions do not have supplemental programs.

Contact: Governor's Alternate in State Capital,
OR
Regional Commission Office, listed in Table 4 on page 48.

Mobile Home Financing

A variety of programs are available from HUD and FHA for new and existing housing. Those programs which are applicable and useful to your community can be determined by discussions with your HUD Area Office or HUD/FHA Insuring Office (See Inside Back Cover for cities in which they are located).

Two programs which may be of value in the construction and rapid growth stages of energy development relate to the financing of mobile homes and their parks:

Mobile Home Loans – made by approved lending institutions and insured by HUD. Units must be at least 10' x 40' and meet HUD standards. Loans up to $10,000 for single-unit and $15,000 for double-wides, with maximum term of 12 to 15 years. (14.110)

Contact: Any HUD/FHA approved lender

NOTE: Eligible veterans may obtain mobile home financing from approved lenders with loans guaranteed by the Veterans Administration. Maximum guarantee is $12,500 for 12 years for single-units, and $20,000 for 20 years for double-wides. Contact VA approved lending institution.

Mobile Home Parks – FHA will insure loans from approved lenders for mobile home park development. Mortgage may cover 90 per cent of park value up to a limit of $3,250 per space (or more in "high-cost" areas). The maximum term is 40 years. (14.127)

The park must be large enough to be profitable, with no maximum limit. It must contain public utilities and neighborhood amenities. The development must meet the standards of *Minimum Design Standards for Mobile Home Courts,* HUD Handbook 4940.5 (See page 24).

Refer to: Section 207 Mobile Home Park Financing

Contact: HUD/FHA Insuring Office, listed in Inside Back Cover.

Health Services (HEW)

The National Health Planning and Resources Development Act of 1974 (P.L. 93-641) creates a new program of State and area-wide health planning and development. This replaces nearly all previous planning and financial assistance programs. A national network of substate "Health Service Agencies" is being tablished to, among other things, coordinate planning and review all applications for Federal funds.

Assistance is provided for modernization and conversion of existing facilities, for construction of new out-patient facilities, and for construction of new in-patient facilities in areas which have experienced recent rapid population growth. There are three programs:

- Annual allotments to States on the basis of population, financial need and the need for medical facility projects;
- Loans and guarantees up to 90 per cent of cost;
- Grants to publicly-owned health facilities to eliminate safety hazards and to bring facilities to compliance with licensing and accreditation standards.

Projects must conform to a State agency medical facilities plan approved by HEW.

Contact: State Health Agency,
OR
Bureau of Health Planning and Resource Development, Health Resources Administration, Public Health Service, HEW, 5600 Fishers Lane, Rockville, Maryland 20852. (301) 496-6011

D. FEDERAL FUNDS FOR OPERATING PURPOSES

There are many on-going Federal programs for operating purposes. Most of these are from the Department of Health, Education and Welfare to the States. This handbook will not attempt to list them, but rather concentrate on the few programs of other agencies or those directed to local governments.

National Health Service Corps (13.258)

The NHSC was set up to improve the delivery of health care and services in areas critically short of health personnel. The Secretary of HEW may assign personnel to designated communities, with emphasis on primary medical or dental care. The number and type of people assigned will depend on the nature of shortages.

Eligible applicants are States, local health agencies, and non-profit health organizations. The local matching requirements are set up for each individual case. Assignments are normally for a period of two years. There are about 551 health personnel now in 310 communities, including two being assigned to Green River, Wyoming.

Contact: National Health Service Corps program consultant at HEW Regional Office, listed in Table 3 on page 47,
OR
National Health Service Corps, Health Services Administration, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20852. (301) 443-4434

Law Enforcement Assistance Discretionary Grants (16.501)

In addition to the formula grants which LEAA gives to the states (for state and local agencies), there are discretionary funds available. The emphasis has been given to reducing crime in major cities and developing state criminal justice standards. Although the competition is strong, there may be some funds for the unusual problems of impacted communities.

Eligible applicants are States and local governments, or combinations of agencies. Funds may be spent for salaries, operating expenses and some capital costs. A ten per cent match is required for operating and 50 per cent for capital grants.

Contact: Regional Office, Law Enforcement Assistance Administration

Table 2

State Agencies for Planning

State	Federal Region	Regional Commission	State Agency of Local Affairs	State Office Administrating HUD 701 Grants	State Offices for Coastal Development
Alabama	IV	APP PT	Alabama Development Office	Same	Same
Alaska	X		Dept. of Community & Regional Affairs	State Planning & Research	Division of Policy Development & Planning (Gov.)
Arizona	IX	FC PT	Dept. of Economic Planning & Development	Same	–
Arkansas	VI	OZ All	Dept of Planning	Arkansas Dept. of Planning	–
California	IX		Dept. of Housing & Community Development	Office of Planning & Research	California Coastal Zone Conservation Comm.
Colorado	VIII	FC PT	Dept. of Local Affairs	Colorado Division of Planning	–
Connecticut	I	NE All	Dept. of Community Affairs	Dept. of Financial Control	Dept. of Environmental Protection
Delaware	III		Dept. of Community Affairs & Econ. Devel.	State Planning Office	State Planning Office
Florida	IV		Dept. of Community Affairs	Same	Coastal Coordinating Council
Georgia	IV	A/CP PT	Dept of Community Development	Dept. of Community Development	Office of Planning & Budget
Hawaii	IX		(Dept. of Planning & Economic Development)	Dept. of Planning & Economic Development	Same
Idaho	X	PNw All	Planning & Community Affairs Agency	Division of Budget Policy Planning & Coord.	–
Illinois	V		Dept. of Local Government Affairs	Same	Dept. of Transportation
Indiana	V		–	Lt. Governor	State Planning Services Agency
Iowa	VII		Office for Planning & Development	State Office of Planning & Programming	–
Kansas	VII	OZ All	Dept. of Economic Development	Same	–
Kentucky	IV	APP PT	Office for Local Government	Office of Local Government	–
Louisiana	VI	OZ All	Commission on Intergovernmental Relations	Same	State Planning Office
Maine	I	NE All	Bureau of Community Affairs	Comprehensive Planning Division	State Planning Office
Maryland	III	APP PT	Dept. of Economic & Community Development	Maryland State Planning Department	Dept. of Natural Resources
Massachusetts	I	NE All	Dept. of Community Affairs	Executive Office for Administration & Finance	Executive Office of Environmental Affairs
Michigan	V	UGL PT	Office of Community Affairs	Executive Office of the Governor	Bureau of Water Management
Minnesota	V	UGL PT	Office of Local & Urban Affairs	State Planning Agency	State Housing Agency
Mississippi	IV	APP PT	–	Mississippi Research & Development Center	Economic Resources Council
Missouri	VII	OZ All	Dept. of Community Affairs	Consumer Affairs	–
Montana	VIII	OW All	Dept. of Intergovernmental Relations	Same	–
Nebraska	VII	OW All	Div. of Community Affairs	State Office of Planning & Program	–
Nevada	IX		Urban Planning Division	State Planning Coordinator	–
New Hampshire	I	NE All	Office of Comprehensive Planning	Office of Community Planning	Division of State Planning
New Jersey	II		Dept. of Community Affairs	Dept. of Community Affairs	Dept. of Environmental Protection
New Mexico	VI	FC PT	State Planning Office	Same	–
New York	II	APP PT	Office for Local Government	Office of Planning Services	Departments of State
North Carolina	IV	A/CP PT	Department of Community Assistance	Division of Intergovernmental Relations	Dept. of Natural & Economic Resources
North Dakota	VIII	OW All	State Planning Division	Same	–
Ohio	V	APP PT	Dept. of Economic & Community Development	Office of Budget & Management	Dept. of Natural Resources
Oklahoma	VI	OZ All	Office of Community Affairs & Planning	Same	–
Oregon	X	PNw All	Local Government Relations Division	Same	Land Conservation & Development Comm.
Pennsylvania	III	APP PT	Dept. of Community Affairs	Same	Dept. of Outdoor Recreation
Rhode Island	I	NE All	Dept. of Community Affairs	Dept. of Administration	Statewide Planning Program
South Carolina	IV	A/CP PT	(Division of Local Government)	Division of Administration (Gov.)	Wildelife & Marine Resources Dept.
South Dakota	VIII	OW All	State Planning Agency	State Planning Bureau	–
Tennessee	IV	APP PT	Office of Local Government	Tennessee State Planning Office	–
Texas	VI		Dept. of Community Affairs	Office of the Governor	Texas Coastal Resources Program
Utah	VIII	FC PT	Dept. of Community Affairs	State Planning Coordinator (Gov.)	–
Vermont	I	NE All	(Development & Community Affairs)	State Planning Office	–
Virginia	III	APP PT	Div. of State Planning & Community Affairs	Same	Same
Washington	X	PNw All	Planning & Community Affairs Agency	Office of Program Planning & Fiscal Manage. (Gov.)	Dept. of Ecology
West Virginia	III	APP All	–	Federal State Relations (Gov.)	–
Wisconsin	V	UGL PT	Dept. of Local Affairs & Development	Dept. of Administration	State Planning Office
Wyoming	VIII	OW All	Office of State-Federal relations	State Planning Coordinator (Gov.)	–

Table 3

Federal Regional Offices

Region – States	Regional HQ City Area Code	EPA – Env. Prot. Ag. Section 208 Contact	Economic Development Administrator Technical Assistance	Federal Energy Administration – *	Health, Education & Welfare –	Interior – Special Ass't. to the Secretary
I–Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont	Boston, Massachusetts 02203 (607)	John F. Kennedy Bldg. Room 2203 223-5137	Same as III	150 Causeway St. Room 700 (02114) RA 223-3703 ERD 223-3106	Regional Health Administrator JFK Federal Bldg. Government Center 223-6831	John F. Kennedy Bldg. Room 2003K 223-5104
II–New Jersey, New York, Puerto Rico, Virgin Islands	New York, New York 10007 (212)	26 Federal Plaza Room 908 264-1833	Same as III	26 Federal Plaza Room 3206 RA 264-1021 ERD 264-8027	26 Federal Plaza 264-4600	Same as I
III–Delaware, District of Columbia, Maryland, Pennsylvania, Virginia and West Virginia	Philadelphia, Pennsylvania 19106 (215)	Curtis Building 6th and Walnut Sts. 597-8245	Suite 10424 600 Arch Street 597-2312	1421 Cherry St. (19102) RA 597-3890 ERD 597-3606	3535 Market St. PO Box 13716, 19101 597-6492	Same as I
IV–Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee	Atlanta, Georgia 30309 (404)	1421 Peachtree St., N.E. 526-5015	Suite 555 1401 Peachtree St., N.E. 526-6155	1655 Peachtree St., N.E. (30309) RA 526-2837 ERD 526-5463	50 Seventh St., N.E. 30323 526-5817	404 Financial Serv. Bldg. 148 Cain St., N.E. 526-4524
V–Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin	Chicago, Illinois 60604 (312)	230 S. Dearborn St. 353-5673	Civic Tower Bldg. 32 West Randolph St. 353-4565	175 Jackson St. Room A-333 RA 353-8420 ERD 353-0538	300 S. Wacker Dr. 60606 353-5160	32nd Floor 230 S. Dearborn St. 353-8015
VI–Arkansas, Louisiana, New Mexico, Oklahoma and Texas	Dallas, Texas 75201 (214)	1600 Patterson St. Suite 1100 749-1231	702 Colorado St. Austin, Texas 78701 512/397-5193	2626 Mockingbird Ln. PO Box 35228 (75235) RA 749-7345 ERD 749-7701	1114 Commerce St. 75202 749-3396	Fed. Bldg., Room 4030 517 Gold St., S.W. Albuquerque, N.M. 505/766-2838
VII–Iowa, Kansas, Missouri, Nebraska	Kansas City, Missouri 64108 (816)	1735 Baltimore Ave. 374-5618	Same as VIII	112 E. 12th St. PO Box 2208 (64142) RA 374-2061 ERD 374-2931	601 East 12th St. 64106 374-3436	Same as VIII
VIII–Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming	Denver, Colorado 80203 (303)	1860 Lincoln St. Suite 900 837-2722	Suite 505 909 17th Street 837-3511	1075 S. Yukon St. PO Box 26247, Belmar Branch Lakewood, CO 80226 RA 234-2420 ERD 234-2165	Federal Off. Bldg. 1961 Stout St. 80202 837-3373	Building 67, Room 590 Denver Federal Center (80225) 234-3120
IX–Arizona, California, Hawaii, Guam, Nevada	San Francisco, California 94111 (415)	100 California St. 556-7686	Same as X	111 Pine St. Third Floor RA 556-7216 ERD 556-4953	Federal Off. Bldg. 50 Fulton St. 94102 556-6746	450 Golden Gate Ave. PO Box 36098 556-8200
X–Alaska, Idaho, Oregon, Washington	Seattle, Washington 98101 (206)	1200 6th Ave. 442-1216	Lake Union Bldg. 1700 Westlake Ave., North 442-0584	1992 Federal Off. Bldg. 915 Second Avenue (98174) RA 442-7280 ERD 442-7282	Arcade Plaza 1321 Second Avenue 442-0420	Bonneville Bldg., Rm. 702 1002 Holladay St., N.E. Portland, Oregon 97208 503/234-5141

RA – Regional Administrator
ERD–Energy Resource Dev.

Table 4 – REGIONAL COMMISSIONS

These partnerships of the Federal Government and States develop and implement long-range comprehensive economic development programs for certain regions of the United States. All except Appalachian are administered through the Department of Commerce. The major actors in the regional commission are the member States. Local governments should make initial contacts through the State Governor's Alternate or Representative, located in the Governor's Office in the State Capital.

Appalachian Regional Commission

Portions of Alabama, Georgia, Kentucky, Maryland, Mississippi, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia and all of West Virginia.

Office: 1666 Connecticut Avenue, N.W. Washington, D.C. 20235 (202) 967-5728

Coastal Plains Regional Commission

Portions of Georgia, North Carolina, South Carolina.

Office 2000 L Street, N.W., Room 414 Washington, D.C. 20230 (202) 967-3753

Four Corners Regional Commission

Portions of Arizona, Colorado, New Mexico, and Utah.

Main Office: 238 Petroleum Plaza Building, 3535 East 30th Street, Farmington, New Mexico 87401. (505) 327-9626

Room 1033, Federal Building, 517 Gold Avenue, S.E., Albuquerque, New Mexico 87101. (505) 766-3344

Federal Co-Chairman's Office: Commerce Building, Room 1898C, 14th and E Streets, N.W., Washington, D.C. 20230. (202) 967-5534

New England Regional Commission

All of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont.

Main Office: 53 State Street, Suite 400, Boston, Massachusetts 02109. (617) 223-6330

Federal Co-Chairman's Office: Commerce Building, Room 2600, 14th and E Streets, N.W., Washington, D.C. 20230. (202) 967-4343

Old West Regional Commission

All of Montana, Nebraska, North Dakota, South Dakota and Wyoming.

Main Office: Room 306A – Fratt Building, P.O. Box 2502, Billings, Montana 59102. (406) 245-6711, ext. 6665

Energy Office: 201 Main Street, Suite D, Rapid City, South Dakota 57701. (605) 348-6310

Federal Co-Chairman's Office: 1730 K Street, N.W., Suite 426, Washington, D.C. 20036. (202) 395-3491

Ozarks Regional Commission

All of Arkansas, Kansas, Louisiana, Missouri, and Oklahoma.

Main Office: Suite 109 Evergreen Place, 1100 North University Avenue, Little Rock, Arkansas 72207. (501) 378-5905

1601 West Okmulgee Street, Muskogee, Oklahoma 74401. (918) 683-3111

Federal Co-Chairman's Office: Commerce Building, Room 2099B, 14th and E Streets, N.W., Washington, D.C. 20230. (202) 967-2572

Pacific Northwest Regional Commission

All of Idaho, Oregon and Washington.

Main Office: 1205 Washington Street, Vancouver, Washington 98660. (206) 696-3503

Federal Co-Chairman's Office: 2435 Virginia Avenue, N.W., Washington, D.C. 20037. (202) 254-7030

Upper Great Lakes Regional Commission

Portions of Michigan, Minnesota and Wisconsin.

Main Office: Room 504, Christie Building, 120 North Fourth Avenue, West, Duluth, Minnesota 55802. (218) 727-6458

Federal Co-Chairman's Office: Commerce Building, Room 2093, 14th and E Streets, N.W., Washington, D.C. 20230. (202) 967-2845

CASE STUDIES

SWEETWATER COUNTY, WYOMING
Rock Springs and Green River/Jim Bridger Power Plant

Sweetwater County provides an example of how severly an unprepared community can be impacted by energy boom growth. In also provides an example, more recently, of attempts to develop effective local response capability.

Rock Springs, the largest city in Sweetwater County, started as a railroad mining town, but declined in the 1950's as the railroad shifted to diesel power. Trona mining was also important in the county, but contributed little to employment growth. Population grew by only 500 persons during the entire 1960's.

The 1970's are a far more turbulent decade for Sweetwater County. In 1971, the Pacific Power and Light Company and the Idaho Power Company started construction of the Jim Bridger Power Plant. This 1550 megawatt electric generating plant had, at peak construction in 1974, over 3,000 employees. Total county construction employment increased from 370 in 1970 to 4,900 in 1974. At the same time, mining employment unexpectedly rose from 1,500 to 2,650. In four years, total county employment doubled (see Figure 8).

Population rose just as fast, from a total 3 per cent increase for all of the 1960's to a rate of 19 per cent per year from 1970 through 1974. The rate of growth has fallen off only slightly for 1975.

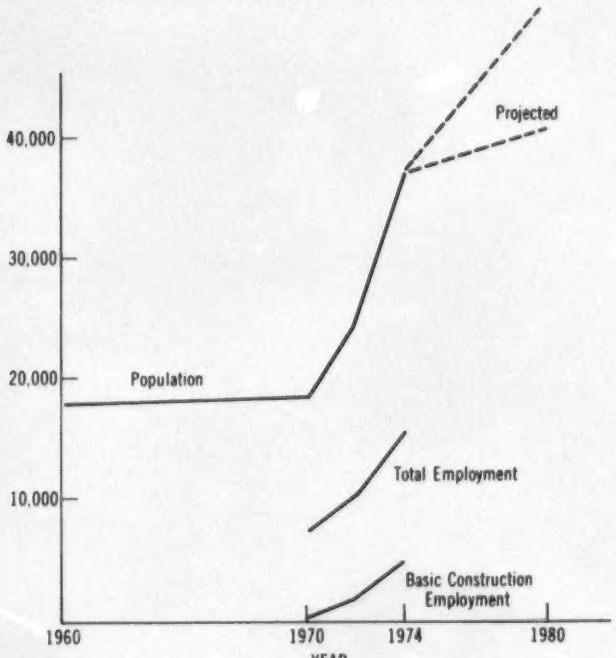
	1960	*1970*	*1974*
Sweetwater County	17,900	18,400	36,900
Rock Springs	11,700	12,000	26,000

Projections by Denver Research institute indicate that county population will be between 40,000 and 49,000 by 1978, and could be as high as 89,000 by the mid-1980's. While this growth has had, and will have, many positive effects, it has also generated severe negative impacts. The Denver Research Institute, after intensive analysis of the boom in Sweetwatrr County, said:

"This boom has:

1) *Degraded the quality of life.* Housing services, recreation, educational facilities all lag far behind the needs.

Figure 8
SWEETWATER COUNTY BOOM



Source Denver Research Institute
(Refer to Footnote 2)

2) *Reduced industrial productivity.* Between 1972 and 1973, mining productivity dropped by 20 per cent to 40 per cent; some construction productivity fell even more.
3) *Threatened the fiscal viability of local government.* Municipalities have serious problems raising operating revenues and financing public facilities; there is an estimated $4 million deficit in school facilities after bonding capacity is exhausted."

More specifically, the impacts include the following:

- Housing: The market for housing has broken down; the new housing is at prices the average worker can't afford; mobile homes are the only alternative -- over 30% of county housing is in mobile homes.
- Health Services: Ten doctors in 1970 – ten doctors in 1974, for double the population; 40% of county residents seek medical care elsewhere.
- Fringe settlements, lack of jobs make this area especially difficult for wives and mothers.
- Social problems include rise in the crime rate, an increase in alcoholism and mental health cases (up 1000 per cent from 1970 to 1974) and a lack of commitment among newcomers.
- Existing Industry: productivity (tonnage per man-day) in the trona mines declined from 25% to 40% from that planned; employee turnover rose sharply, ranging from 35% to 100+% among trona employers in 1973; salaries at the power plant were nearly double that of the trona mines.
- Employee Recruitment: even the power plant contractor has had trouble recruiting and keeping a work force, because of the decline in quality of life.

WHAT DO THE RESIDENTS THINK?

As part of its study of Sweetwater County impacts, Denver Research Institute interviewed 400 households in both city and rural areas in September, 1974. Thirty-nine per cent of the residents had lived in Sweetwater County less than three years. Thirty-one per cent of all residents, and 77 per cent of newcomer construction workers, lived in mobile homes. Eighty-two per cent of rural housing consisted of mobile homes at that time.

Results show that the major problems are seen as "the lack of adequate medical facilities, traffic congestion and a shortage of suitable housing." Asking residents for a priority for improvement of existing services resulted in this list of the five highest responses:

Medical and mental health	86%
Road and street maintenance	62
Suitable housing	49%
Police protection	46
Schools and teachers	44

Fiscal Impacts

The revenue and borrowing structure available to the county and cities does not fit the needs of a boom town.

In the past five years, with the building of the Jim Bridger Power Plant, Sweetwater County, Wyoming and its major city – Rock Springs – have both doubled in size. The valuation in the county, with the new project, has gone up $146 million. The assessed valuation in Rock Springs, with most of the people, has gone up only $5 million. The assessed valuation per capita dropped in both Rock Springs and its neighboring City of Green River:

Assessed Valuation Per Capita
(1960 Constant Dollars)

	1960	*1970*	*1973*
Green River	$1,029	$ 929	$ 528
Rock Springs	1,147	1,029	617

The reasons for the assessed valuation problems in cities are primarily:

1) Slowness to reassess property for increased values and,
2) The energy project (and other industries) are all outside the cities' boundaries, thus paying no city taxes.

Almost all the impacts of employment and population, of land use and housing, of community service show up in the budgets of the affected cities, counties and school districts. The increases can be quite big: In Rock Springs, while population doubled from 1970 to 1975, the budget grew from $0.7 million to $5.6 million. In the past year, the Green River budget went from $1.4 million to $3.8 million. This year it includes $2.5 million for capital improvements, primarily a new sewage treatment plant.

Reasons for the Problem

A number of explanations can be offered for the community breakdown in the face of rapid growth. The central reason was that the rate of growth was just too great to be handled. Sweetwater County and its cities did not have the professional staff needed to plan for and cope with growth. General plans were prepared in 1972 for both the County of Sweetwater and the City of Rock Springs

These helped in knowing existing conditions and recognizing problem areas, but these plans did not effectively respond to growth because they underestimated its magnitude. The 1972 plans, using energy company estimates, projected 800 construction workers by the year 1975. In fact, over 3,000 were used on the Jim Bridger Power Plant and hundreds more in the trona mines. However, even had the impacts been projected accurately, action might not have followed. It can be hard to convince people that the impact is coming and that it is serious.

Public and private interest in Sweetwater County have been spurred to action by the events of recent years. Future planning will be far more effective than that of the recent past. Some of this county's solutions may be of use to other impacted areas. A Priorities Board has been set up with members from public agencies and private industry to project growth and plan responses (See page 14). The 12 industries in the county have formed the Southwest Wyoming Industrial Association (See page 9). The City of Green River has now hired an administrative assistant to the mayor, and requests have been made for funds to hire a professional director for the Priorities Board.

For further Reference:

Boom Town Management, by Jack Gilmore and Mary Duff (of Denver Research Institute). 200 pages, plus appendices. Published November, 1975. $15.00

Obtain from: Westview Press, Inc., Flatiron Industrial Park, Boulder, Colorado 80301.

CALVERT COUNTY, MARYLAND

Calvert Cliffs Nuclear Power Plant

Calvert County is a rural county along the Chesapeake Bay in southern Maryland. Population had grown to 20,700 in 1970, a 31% increase in ten years, as jobholders in the Washington, D.C. area purchased homes and commuted to work. Nearly half of the county residents commuted outside for work in 1970.

In the late 1960's, Baltimore Gas and Electric Company started construction on a 1,600MW nuclear power plant at Calvert Cliffs. Over the eight year construction period, employment rose to a peak of over 2,500 workers. (Figure 9) While many of the semi-skilled and unskilled labor force were hired locally, most of the predominent skilled trades came from the nearby Washington and Baltimore areas. This pattern is typical of nuclear power plants which are located in rural areas close to their metropolitan customers.

The major negative impacts were in labor force, housing and traffic:

Labor Force: Hiring locally for the semi-and unskilled jobs severely affected the tobacco and lumber industries which have dominated Calvert County for centuries. Tobacco field hands, for example, could get about three times their previous pay working at the power plant. Farmers were fortunate in being able to pass on some of the cost of competitive wages, but a number of lumber mills went out of business.

Housing: Construction started at a time when the housing market was already tight. Demands came from Washington oriented families and those seeking bay shore recreation homes. Construction workers could afford to pay more than current residents, and rentals went up two or three times. Land and house prices have about doubled over preconstruction levels.

The impact was not as serious as it could have been, as many of the skilled workers commuted from their nearby homes (and impacted traffic). Pressures were sufficient to displace many low and moderate income families who had to move outside the County. This made it difficult to attract and retain county and school employees.

Traffic: The large number of commuters in the work force caused traffic congestion. In the peak year, 2,000 vehicles per day entered or left the plant at the 4 p.m. shift change. The existing two-lane road, with a capacity of 800 vehicles per hour, was overloaded. Only 10% of the vehicles were car pools.

School enrollments were not affected significantly with only 250 students from construction families at the peak. Social services were increased to serve county residents who had been affected by higher housing costs. No major increase occurred in public service requirements because of the construction.

Beneficial Impacts

Two major beneficial impacts occurred: During construction, the county had a low unemployment rate, 3.6 per cent at the peak in 1970. New skills increased job mobility for county residents (but also adversely affected local farmers and other businesses). Second, the tax base of Calvert County has nearly tripled with the completion of the power plant. This has enabled the county to improve services, and to initiate a major public facilities construction program. Most of the construction investment will go to alleviate deficiencies that existed from the previous low income and low tax base era.

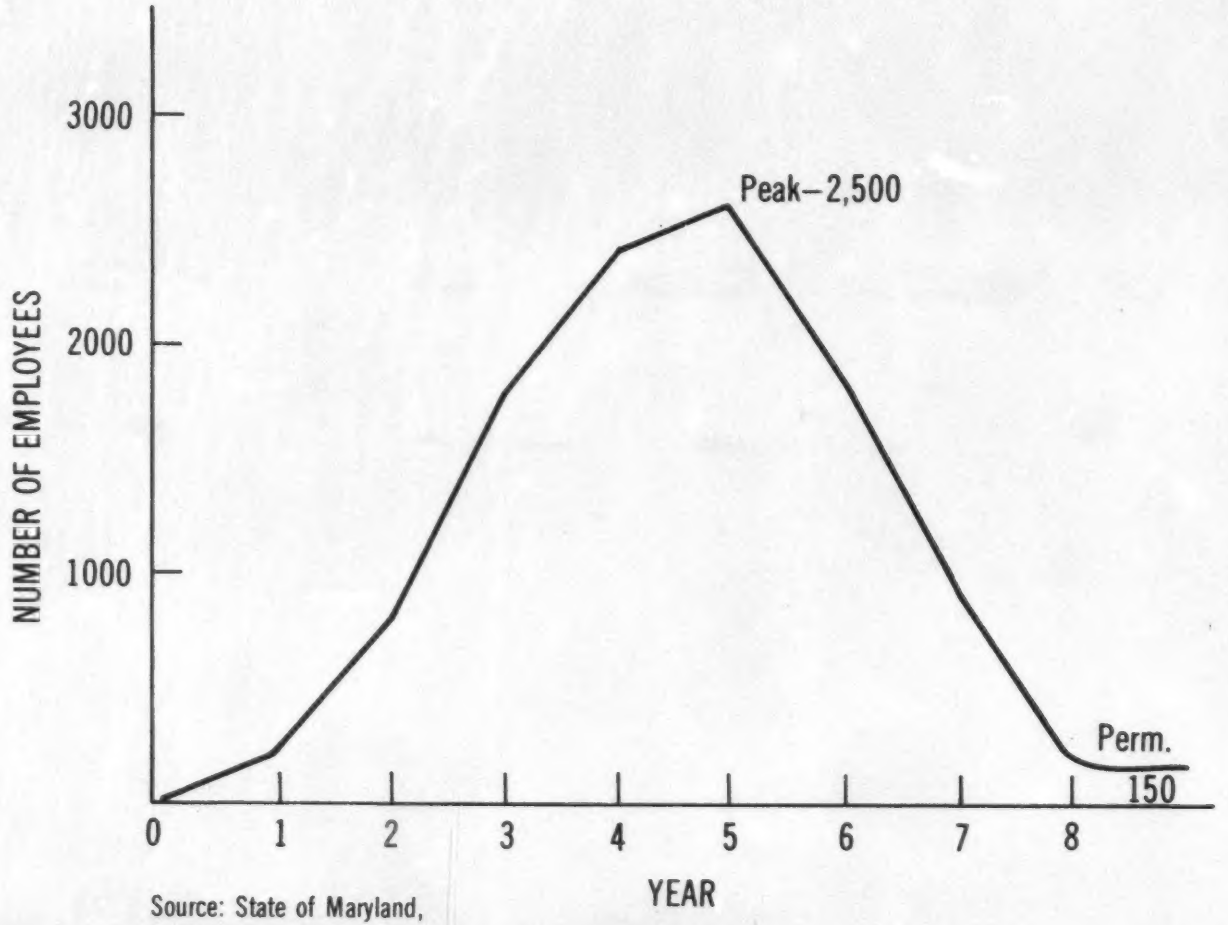
Calvert County did not benefit as much from the construction as it might have, for example, in obtaining new shopping facilities, for it was poorly equipped to predict and plan for the impacts. While the nuclear power plant has had the biggest effect of any activity in the history of the county, the decision and the timing was entirely out of county hands. The energy company and the Atomic Energy Commission made the decisions.

The first comprehensive land use planning and zoning were adopted in 1967, after the plant started. One serious concern is that the plant has about 900 acres of excess land zoned for industry. With additional power plants proposed for the area, Calvert has joined with two other southern Maryland counties to do area-wide planning, using HUD 701 funds.

Furthermore, the county has hired its first administrative officer, finance officer, engineers and planners. This staff has been able to plan for the expenditure of the new taxes, for the added growth unrelated to the power plant, and for obtaining State and Federal assistance for public projects.

Contact: Jack Upton, Administrative Officer, Calvert County Court House, Prince Frederick, Maryland 20678. (301) 535-1600

Figure 9
CONSTRUCTION EMPLOYMENT AT CALVERT CLIFFS NUCLEAR POWER PLANT



Source: State of Maryland,
Department of Natural Resources
(Refer to Footnote 6)

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CAMPBELL COUNTY (Gillette), WYOMING

Oil and Coal Mining

Campbell County has already been through one boom. This resource-rich portion of the Powder River Basin of northeast Wyoming had an oil boom which peaked in 1966. Population went from 3,850 in 1960 to 7,200 in 1970.

The effects of that boom had diminished in the early '70's when the national need for energy, especially low-sulpher coal, hit Campbell County. This county, with over half of Wyoming's coal, has more coal than any other county in the United States. Plans have been made to export much of this coal, especially to the Midwest, from ten mines. Other coal will be used for at least two coal gasification plants and two additional power plants.

Currently, two major projects are underway: a railroad of 126 miles to Douglas, Wyoming for coal export, and the new Wyodak Power Plant, a 330MW project of the Black Hills and Pacific Power and Light companies. The project started in 1974, will peak at 640 employees in 1976 and be complete in 1977 with an operating force of 50 persons. These projects alone, and the preparation for those proposed, have increased county population to about 14,000 today. This could grow to 30,000 by 1980 if all planned projects are built. The present residents generally favor this coal development, which they see as a more permanent base than the oil activities of the past boom.

Growth Management

The major impacts will fall on Gillette, the county seat and only city within the county. Gillette, therefore, is taking the lead in planning for future growth. The part-time mayor spends most of his time on energy impacts. To assist him – and other elected city and county officials – the City of Gillette has become the first user of the Wyoming Human Services Project (See page 45). For one year, seven people are assigned to Gillette working in city administration, city legal service, public health, mental health, recreation, day care center, and public assistance. The individual team members spend half their time on specific assistance to local agencies, and the other half working as a team on coordination of human services.

While in the community, the team members work with a project field coordinator, and a community advisory board consisting of the Mayor, superintendent of schools, teacher, rancher, chamber of commerce manager, public health supervisor, mental health director and energy company representative. The one-year project in Gillette is being supported by a $60,000 grant from the Economic Development Administration (Title IX) and $18,400 from the State Department of Public Assistance and Social Services using Title 20 revenue sharing funds.

Contact: Dr. Keith Miller, Project Field Coordinator, P.O. Box 1104, Gillette, Wyoming 82716. (307) 682-4219

Land Use and Housing

The lack of housing has been severe. The influx of new people spilled over into ugly and scattered mobile home parks on the fringe of the city. About 40 per cent of the county's population now lives in these mobile home parks, most of which have dirt streets, and mobile homes crowded as close together as possible. There are few trees, laundries, recreation facilities or places to play. They have been described as "aluminum ghettos." Most of these parks have been located outside the city, out of its control. The city and county have a joint planning commission which is now working on the problems of mobile home park standards and enforcement.

A general plan was adopted by the city in 1973, and a full-time planner has been hired. The city has powers of review over sub-divisions in the adjacent area of the county (except mobile home sub-divisions). Campbell County is using EPA 208 funds for wastewater planning. Some of the topographic and land use information gathered under this program will be used for updates of the general plan.

Public Works

The water quality was good before the boom, but the well field is inadequate for future growth. Some $12 million will be needed to pipe in water from a better water formation that surfaces to the east. The sewage plant is beyond operating capacity. To expand it, the city will get a $675,000 loan from the State Farm Loan Board, using the newly adopted Wyoming severance tax on coal.

Fiscal Impacts

As in many other impacted areas, the tax base of the plants and mines is in the county, while the majority of the people are in the city. Furthermore, Campbell County has a large tax base from the oil activities which started in the 1960's. Because of this disparity, Gillette and Campbell County are sharing financial responsibilities. The county paid the local share of the recreation center, matching Federal funds.

The fire departments of the city and county are being merged as a county fire service, paid for entirely by the county. Other services may be considered for merger or county financing if they serve all the county residents.

Contact: Michael Enzi, Mayor, City, P.O. Box 540, Gillette, Wyoming 82716, (307) 682-7397.

NORTH SEA OIL AND GAS

Scotland

Why look to Scotland for lessons about the impacts of offshore oil? The Gulf of Mexico experience in the United States followed many years of onshore production. Its growth was gradual, up to one million barrels per day after thirty years. North Sea production starts with no onshore facilities, and will exceed one million barrels only five years after the first oil comes ashore. The Atlantic Coast experience with OCS (Outer Continental Shelf) oil and gas is likely to be similar to the North Sea experience, not that of Gulf of Mexico.

Offshore oil and gas activities fall into three phases:

- exploration phase up (to ten years)
- development phase, from discovery to production, (about four to five years) and
- production phase, (another five years to get fully operational, then a life of 10 to 50 years)

The major finds of oil and gas, spurred on by intense British desire to become less dependent on Mid East oil, have had significant impacts on Scotland. Aberdeen, a university and fishing city of 180,000 population, has become the "Houston of the North," with two thousand permanent jobs in oil. Population is expected to increase to about 200,000 by 1990. The harbor has been redeveloped to serve nine supply bases. Traffic at the airport has doubled in five years. The small fishing town of Peterhead (14,500), grew because of development offshore from it, and because of congestion at Aberdeen Harbor. With two supply bases, a 132MW power plant under construction, and an expanding fishing fleet, the population of that town has grown to 16,000 and will likely reach 20,000 by 1978.

Impacts have been both positive and negative. New jobs have been created in an economy which had been depressed. Existing housing has proved inadequate, and prices have tripled. Lack of housing has made it difficult to attract planners. There is a strain between long-time residents and newcomers. Residents in coastal communities fear permanent changes in their communities. Existing industry has been hard hit. In 1969, a tire factory opened in Aberdeen, designed to give the area an economic boost. Now, with oil companies paying much higher wages, the workers are leaving and turnover is a major problem.

Other conflicts are expected. There is little good agricultural land in Scotland. Some of this will be lost to oil and gas projects. Oil supply ships and fishing boats compete for dock and harbor space. The fishing industry has been growing lately, with increased catches and higher prices. Wages have gone up, so there is less movement from fishing to oil. But processing plants have lost many workers.

The most careful planning for onshore impacts was done in the Shetland Islands. The Brent Field, 100 miles east of the islands, is expected to be one of the biggest in the North Sea. The companies would bring the oil ashore by pipeline to the Shetland Islands and then carry it by tanker to refineries on the mainland. This meant a deepwater port.

Shetland did not want oil activities scattered around the five or more possible sites. Although it had no plan prior to oil, the county adopted a well-prepared plan to concentrate all oil activity at Sullom Voe. Seventeen oil companies will cooperate to build one of the world's largest oil-transfer facilities, with as many as four pipelines from North Sea oil fields.

Where to house the 1,000 workers? The entire county has a population of only 18,000. The largest town of 6,000 is an hour's drive away. After rejecting the idea of a new town, the plan called for dispersing the growth among four nearby communities, in a way that will prevent a haphazard region-wide sprawl. The precise number of new houses and population in each town are set by the county.

The experience of Shetland may be applicable to remote communities along the Alaskan and Atlantic coasts. One reason for Shetland's success in controlling the planning is due to an unintimidated attitude of local officials toward the oil industry.

The lessons of Scotland include:

- Care must be taken to resolve conflicts between oil activities and conflict with existing activities, such as fishing.
- The community chosen for an oil harbor and facilities should have sufficient infrastructure to cope with rapid growth. Lacking that, sufficient time must be provided to plan and build supporting infrastructure.

The comparison among Aberdeen, Peterhead and smaller communities suggests that large communities can absorb growth more easily than small ones, and those with a diverse economic base adjust more easily than those dependent on a single activity, such as fishing or tourism.

For Further Information:

> *Onshore Planning for Offshore Oil: Lessons from Scotland,* (see page 38), The Conservation Foundation, 1717 Massachusetts Ave., N.W., Washington, D.C. 20036, now has available a 21 minute slide-tape show based on the book.

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— indicates "idea for action" or program description

* Case study

FOOTNOTES

[1] *The Social, Economic and Land Use Impacts of a Fort Union Coal Processing Complex,* by Denver Research Institute, for Energy Research and Development Administration (Interim Report, dated January 1975)

[2] *A Growth Management Case Study: Sweetwater County, Wyoming,* by Denver Research Institute, for Rocky Mountain Energy Company, December 1974.

[3] *Socioeconomic Impacts and Federal Assistance in Energy Development Impacted Communities in Region VIII,* by Committee on Socioeconomic Impacts of Resource Development, Mountain Plains Federal Regional Council, Region VIII, 1975

[4] These figures developed by the Office of Planning and Management Assistance, U.S. Department of Housing and Urban Development, based on data from sources listed in the References (page 00), described throughout this publication, and listed in these footnotes.

[5] *Housing and Community Services for Coal Gasification Complexes Proposed on the Navajo Reservation,* by Development Research Associates and Gruen Associates, for El Paso Natural Gas Company and Western Gasification Company, April 1974. (See page 00).

[6] "Review of Socio-economic Impacts of the Calvert Cliffs Nuclear Power Plant on Calvert County, Maryland and Comparison with Kent County, Maryland," by Howard Needles Tammen & Bergendoff, for the Maryland Power Plant Siting Program, Department of Natural Resources, January 1975.

[7] Interview with Senior Engineer, Navajo Generating Station, Page, Arizona, a unit of the Salt River Project.

[8] Interview with Plant Manager, Four Corners Power Plant, Fruitland, New Mexico.

[9] Same as Footnote 4.

[10] Same as Footnote 4.

[11] Same as Footnote 4.

[12] Same as Footnote 4.

[13] *Onshore Planning for Offshore Oil: Lessons from Scotland,* by Pamela L. Baldwin and Malcolm F. Baldwin. (Washington, D.C.: The Conservation Foundation, 1975)

[14] Same as Footnote 2.

[15] This is one of the few references in this publication to Indian Reservations. While impacts may be similar, the structure for planning and response is so different from that off the Reservation that few experiences are useful as examples for other communities.

[16] Same as Footnote 3.

[17] *Interim Report and Recommendations,* Legislative Select Committee on Industrial Development Impact, Wyoming State Legislature, December 1974.

[18] "Projecting Public Service Effects of a New Industry in a Rural Area," by F. Larry Leistritz, Arlen G. Leholm, and Thor A. Hertsgaard, a paper presented at the 1975 summer meeting of American Agricultural Economics Association, August 1975.

Table 5

HUD Regional Offices and Area/FHA Insuring Offices

Region	States	Address	Phone Contacts[1]	Area Offices (FHA Insuring)[2]
I	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	Room 800 JFK Federal Bldg. Boston, Mass. 02203	RA 617/223-4066 CPD 617/223-4327 P&M 617/223-4329	Boston; Manchester, N.H.; Hartford, Conn.; Burlington, Vt.; (Providence, R.I.; Bangor, Me.)
II	New Jersey, New York, Puerto Rico, Virgin Islands	Room 3541 26 Federal Plaza New York, N.Y. 10007	RA 212/264-8068 CPD 212/264-4138 P&M 212/264-8721	New York; Newark, N.J.; Camden, N.J.; Buffalo, N.Y.; San Juan, P.R.; (Albany, N.Y.)
III	Delaware, D.C.; Maryland, Pennsylvania, Virginia, West Virginia	Curtis Bldg. 6th & Walnut Sts. Philadelphia, Pa. 19106	RA 215/597-2560 CPD 215/597-2548 P&M 215/597-2495	Philadelphia & Pittsburgh, Pa.; Washington, D.C.; Baltimore, Md.; Richmond, Va.; (Charleston, W. Va.; Wilmington, Del.)
IV	Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee	Rm. 211-Pershing Point Plaza 1371 Peachtree St. N.E. Atlanta, Ga. 30303	RA 404/526-3521 CPD 404/526-5468 P&M 404/526-3521	Birmingham, Ala.; Jacksonville, Fla.; Atlanta, Ga.; Louisville, Ky.; Jackson, Miss.; Greensboro, N.C.; Columbia, S.C.; Knoxville, Tenn. (Coral Gables & Tampa, Fla.; Memphis & Nashville, Tenn.)
V	Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin	300 S. Wacker Dr. Chicago, Ill. 60606	RA 312/353-5680 CPD 312/353-1680 P&M 312/353-1680	Detroit, Mich.; Chicago, Ill.; Indianapolis, Ind., Minneapolis, Minn.; Columbus, Ohio; Milwaukee, Wisc.; (Cincinnati & Cleveland, Ohio; Grand Rapids, Mich.; Springfield, Ill.)
VI	Arkansas, Louisiana, New Mexico, Oklahoma, Texas	Room 14B35 Earle Cabell Fed. Bldg. 1100 Commerce St. Dallas, Tex. 75202	RA 214/749-7401 CPD 214/749-7481 P&M 214/749-7481	Dallas, Tex.; Oklahoma City, Okla.; San Antonio, Tex.; New Orleans, La.; Little Rock, Ark.; (Albuquerque, N.M.; Fort Worth & Houston & Lubbock, Tex.; Shreveport, La.; Tulsa, Okla.)
VII	Iowa, Kansas, Missouri, Nebraska	Room 300-Fed. Bldg. 911 Walnut Street Kansas City, Mo. 64106	RA 816/374-2661 CPD 816/374-5146 P&M 816/374-5146	Kansas City, Ks.; St. Louis, Mo.; Omaha, Neb.; (Des Moines, Iowa; Topeka, Ks.)
VIII	Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming	Fed. Bldg. 1961 Stout Street Denver, Colo. 80202	RA 303/837-4881 CPD 303/837-4018 P&M 303/837-3207	No Area Offices (Casper, Wyo.; Denver, Colo.; Fargo, N.D.; Helena, Mont.; Salt Lake City, Ut.; Sioux Falls, S.D.)
IX	Arizona, California, Hawaii, Guam, Nevada	P.O. Box 36003 450 Golden Gate Ave. San Francisco, Ca. 94102	RA 415/556-4752 CPD 415/556-5720 P&M 415/556-5724	San Francisco, Calif.; Los Angeles, Calif.; (Honolulu, Hi.; Phoenix, Ariz.; Reno, Nev.; Sacramento & Santa Ana & San Diego, Calif.)
X	Alaska, Idaho, Oregon, Washington	Arcade Plaza Bldg. 1321 Second Ave. Seattle, Wash. 98101	RA 206/442-5415 CPD 206/442-4534 P&M 206/442-4534	Seattle, Wash.; Portland, Or.; (Anchorage, Ak.; Boise, Id.; Spokane, Wash.)

[1] RA-Regional Administrator; CPD-Assistant Regional Administrator for Community Planning and Development; P&M - Planning and Management Office

[2] All cities with Area Offices have Insuring Offices; cities with Insuring Offices only are enclosed in parentheses.

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